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ARTICLE I.

Inflammation of the Vena Portæ (Pylephlebitis). By Dr. John Waller, of Prague. Translated from the German, by Daniel Stahl, M.D., of Quincy, Illinois.

The author, before entering upon the subject of his treatise, details the history of five cases of inflammation of the vena portæ, with their post mortem appearances. These cases are very minutely and too lengthily narrated to fit them for the narrow limits which this Journal prescribes for non-original matter. The translator has therefore deemed it prudent to communicate the results which the author has drawn from his and other cases; and it is hoped that this sketch may give an impulse to our American medical practitioners to direct their observations to a disease which, although hitherto overlooked, cannot be rare in a country where diseases of the portal system are as prevalent as they are in the western and southern parts of America.

Anatomical Character.—Referring to what *Rokitansky* has said in his Treatise on Inflammation of the Vena Portæ, the author confines himself to the results drawn from the cases detailed.

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1. The changes in the parieties of the vena portæ, were, in all the cases, trifling, and stood in no proportion to the morbid changes of the contents of the vena. The circumstance, that in one case the parieties of the superior mesenteric vein were whitish-gray, shrivelled, obliterated, and almost cartilaginous in some places, renders it probable that the inflammatory action proceeded from thence. The lumen of the tube of the vein was, in all cases, dilated by the products of inflammation contained in its canal, the trunk of the vein was very much distended by its contents, and its morbid condition perceptible by the eye from its external appearance.

2. Changes in the blood itself of the vena portæ; (*a*) blood coagulations of different degrees were found in four cases; (*b*) pus was absent in three cases; (*c*) acute medullary sarcomatous depositions were found in two cases. Concerning the extent of the inflammatory action in the portal system, it was found that in the first cases only was the spleen free; in the second and fifth were the branches of the vena portæ in the liver, its rami and trunk, but not the splenic and mesenteric vein; in the third case, the splenic vein, one branch of the inferior mesenteric vein, the trunk to its finest ramifications; in the fourth case, the vena portæ in its whole extent, implicated in the morbid process. That we have to deal, not with a primary but a secondary phlebitis, called forth by bloody coagulation, is evident, among other reasons, from the entire absence of anatomical changes in the parieties of the vena portæ, whilst the marks of inflammation of its contents are so obvious. The coagulation of blood was, in all cases, the first change, no matter whether this took place spontaneously or whether it was produced by pus or its elements. In these coagulations, takes place partly an imperfect, partly a perfect excretion (or separation) of fibrini in the canal of the vein; the longer the disease continued the more complete was the change of the lymph. Coagulations with pus, as a sequence to the suppurative phlebitis, manifested itself in the first secondary inflammation of the parieties of the superior mesenteric veins; in the other cases, death took place before any sequelæ could develop themselves. The time within which, after the coagulation of the blood, inflammation of the parieties of the vein can take

place, can be various. Concerning the duration of the disease, there appeared, in the first case, even after the forty-seventh day of sickness, no inflammation of the vena portæ, with the exception of one part of the superior mesenteric vein; whilst in the fourth case it was observed in the course of four days. It appears, therefore, that the acuteness and the intensity of the disease of the blood exercise a certain influence.

Symptomatology.—To find the vena portæ and its branches, by means of physical examination is, by their anatomical position, impossible; we must, therefore, depend on the other phenomena observed in the reported cases, and here we have, before all others, to consider the *objective local symptoms*. Among these is the abdominal distention, which is caused either by meteorism or accumulation of serum, the most prominent. Neither meteorism nor ascites appear to have diagnostic value in pylephlebitis, because there can, in no case, be shown a direct connection of it with inflammation of the vein; meteorism depended on the pyæmia and on the peritonitis, which existed simultaneously; the ascites depended on cancer and granulation of the liver. The size of the liver was enlarged in all the five cases. The cause of this enlargement was—in the first two cases, besides numerous abscesses in the liver, a distention, with pus and plastic coagulations, of the ramifications of the vena portæ; in the third case a large quantity of pus in the branches alone of the vena portæ; in the fourth and fifth cases, besides the blood coagulations and cancerous depositions in the portal ramifications, and abundant cancerous deposition in the substance of the liver. It follows from this that, although the increase of the volume of the liver is intimately connected with inflammation of the portal ramifications, we cannot, from this symptom, infer, with certainty, the existence of this disease, because many other diseases have the same symptom. Icterus was observed in four cases—in the first two and the last two; it was not observed in the fifth case. In the first and second cases were found numerous abscesses in the liver, which contained pus mixed with bile. In the fourth case was granulated liver and sarcoma, the cause of the icterus. In the last case, the hue of the skin was such as is observed in scirrhous dyscrasia. Now, whether the jaundice hue of the skin arose in consequence of pylephle-

bitis without abscesses of the liver or not, in none of the cases related can jaundice be the consequence of pyæmia alone; jaundice cannot, therefore, be regarded as a pathognomic symptom. Enlargement of the spleen has been mentioned already by *Schoenlien* as a diagnostic symptom, and was found in four of our cases. Anatomy informed us of mechanical hyperæmia as the cause of this enlargement in the first three cases, to which, in the second case, was added partial plastic exudation; in the third case, moreover, an abundant secretion of pus in the smallest beginning and in the trunk of the splenic vein. In the fourth case the enlargement was deducible from granulation and scirrhus of the liver; and in the fifth case, at last, was the spleen even smaller—its skeleton, however, hypertrophied. Enlargement of the spleen can obviously be produced by inflammation of the vena portæ, and furnishes, in connection with the other symptoms, no unimportant diagnostic sign in those cases where a minute examination of the size of the spleen by means of pecussion is permitted by the condition of the thoracic and abdominal organs. *Balling* and *Schoenlein* mention nausea, vomiting, and even vomiting of blood, as symptoms. The author observed in but three of the recorded cases vomiting of whitish or yellowish fluid; it was occasioned in one case by encephalitis; in another by chronic catarrhal affection of the stomach and pressure of the scirrhous liver upon the stomach; in the third case, where vomiting took place but once, was no sufficient explanation by a post mortem examination discovered. Vomiting can, therefore, in the cases recorded, not be considered as a symptom of pylephlebitis. The alvine evacuations are seldom normal; they were tardy in the first case; sero-mucous diarrhæ, which was at times deep green, tormented the patient of the second case; constipation was in the third; then yellow, greenish discharges, which were sometimes mixed with streaks of blood, appeared in the fourth case; and in the fifth were muco-serous or dark, soft evacuations. Only the third case showed in the mucous membrane of the small and large intestinal canal partial acute catarrh; in the fourth case, chronic catarrh in the same parts and also in the stomach—the intestinal canal of the other patients showed no particular abnormity. The diarrhæa of the second patient

must, therefore, be considered as a symptom of pyæmia; and the constipation of the third must be ascribed to encephalitis. The chronic catarrh of the fourth, and the dark, ruft evacuations of the fifth, existed prior to the advent of the phlebitis. The variously constituted alvine evacuations, as well as the hæmoptysis, can accompany peryphlebitis; yet they never stand in immediate connection together, but manifest themselves only by means of the mechanical hyperæmia of the intestinal mucous membrane or of other complications. The distention of the venæ epi and hypogastricæ, produced by mechanical hyperæmia, which *Schoenlein* has defended as a symptom of our phlebitis, has not been observed by the author. Pain, the *subjective local symptom*, was not at all present in the fourth case, was experienced by times, and increased on pressure in the first case, and in the second case was the whole epigastrium sensitive, the inguinal iliac regions very painful; in the third and fifth cases was pain also severe. In all of these cases existed complications which, besides the inflammation of the vena portæ, caused pain. It is, therefore, not certain whether the inflammation of the vena portæ is accompanied by pain or not. Ascites has, by *Cruveilheir*, been considered as a symptom of pylephlebitis; neither the author nor other observers had opportunity to confirm this; sure it is, that obliteration of the vena portæ, by whatever cause produced, has ascites as a consequence. The œdema of the lower extremities, which was present in cases No. four, and five, (in the two last already prior to the inflammation of the vena portæ) and was absent in cases No. one and three, is, for anatomical reasons, not to be regarded as depending on inflammation of the vena portæ; because the veins of the lower extremities lose themselves, not in the vena portæ, but in the vena cava inferior. Occasional pulsation of the right jugular vein, pulsation in the abdomen and in different places of the body, fainting, dry cough and the like, which *Balling* regarded as symptoms of this disease, cannot be regarded as such by the author, because he himself has neither observed them nor can he explain their connection with the disease. In relation to *the functions of the vascular system*, Baczynski thinks to have observed in the inflammatory stage the symptoms characterizing inflammatory fever, and in the second stage a sinking (depression) of the

whole nervous and vascular system; *Schoenlein* boasts to have recognized, by a rigor, the transition of an inflammation from the peritoneum to the vena portæ. The possibility that inflammation of the vena portæ may be accompanied by an inflammatory fever, cannot be denied; the observations, which are before us, establish only that form of fever which has heretofore been recognized as adynamic or nervous; this form of fever proves, in our cases, only the existence of pyæmia. In the second and third of the detailed cases seems to exist no doubt but what the advent of the inflammation of the vena portæ was announced by rigor; and even in the fourth and fifth cases was rigor the first symptom of the inflammation of the vena portæ. The pulse was, throughout, accelerated, and beat ninety-two to one hundred and twenty times in a minute. The skin, was, in every case very hot; in the first, at first dry, afterwards profuse perspiration, as was the case in all the other cases, and in two cases there were miliariæ; in the fourth case, petechiæ. In the mucous membranes we find in the first case pulmonary catarrh; in the second and third cases croup (?) of the mucous membrane of the fauces as consequences of pyæmia; and also in the third case acute catarrh of the small and large intestines from pyæmia. General peritonitis followed plainly in consequence of pyæmia in the third case. The pyæmia manifested its deleterious influence in the reproductive sphere by a speedy disappearance of fat and muscular substance; it caused but slight deviation in the nervous system; the cerebral symptoms in the third case, must be ascribed to the encephalitis. Two of the patients showed a peculiar gloomy expression, apparently emanating from deep suffering. If, therefore, some observers mention delirium, stupor, distortion of features, wakefulness or coma as symptoms of inflammation of the vena portæ, these symptoms can, according to the author's observations, be deduced from pyæmia. Particularly worthy of regard, as symptoms, are the enlargement of the liver, jaundice, pyæmia, and enlargement of the spleen; but, supported even by these, the diagnosis cannot be positive.

Duration, Course, and Termination.—The shortest time of illness in the recorded cases, was three, and the longest, forty seven days. According to this difference of duration, has this disease been distinguished into acute and chronic;

but this is unimportant. Likewise has the acute been divided into an inflammatory and adynamic stage; as cause of the adynamic condition was, in all cases, pyæmia observed. The termination of inflammation of the vena portæ in health cannot be doubted; but has as yet not been observed. The most frequent termination was in suppuration, which, to recognize at the sick bed, seems to be difficult. A consequence of the suppurative pylephlebitis is the formation of abscesses in the liver; adhesion and obliteration take place in the trunk, or, more frequently, in the branches and rami of the vena portæ; this termination manifests itself by enlargement of the spleen, hyperæmia of the mucous membrane of the intestinal canal and stomach, swelling of the hemorrhoidal veins, hyperæmia of the peritoneum, ascites, &c., &c.—all symptoms which can be traced to mechanical hyperæmia and its consequences. The most frequent termination, death, took place in all the cases observed; in our cases it was caused partly by pyæmia, partly by scirrhous dyscrasia, and scirrhous degeneration of the stomach and of the liver. Complications, also, can cause death. Some were cause, others consequence of pyæmia; others were caused by scirrhous discrasia; ascites and anasarca were consequences of granulation of the liver and of scirrhous of the liver and its krasis.

Ætiology.—The author considers the case, observed and described by *Balling*, as primary pylephlebitis; there was to be found, neither in the cadaver nor at the sick bed, a cause of the disease, and the diseased condition reached in the tunics of the blood vessels to a higher degree, and seemed to be of an older date, than in the blood itself. As causes of the primary pylephlebitis, are to be mentioned traumatic influences and cold. Almost all the cases of inflammation of the vena portæ, which have, as yet, been observed, are secondary, i. e. the coagulation of the diseased blood is the primary and most essential occurrence, after which inflammation of the tunics of the veins is developed. That this has also been the case in the five cases recorded, is shown by the author in detail. According to the observations of others, pylephlebitis appears also frequently as secondary disease; it is developed in consequence of inflammation of the substance of the liver, abscesses of the liver, of the bilia-

ry ducts, of the spleen, or in consequence of the inflammation of other veins. We know nothing certain as to a peculiar predisposition to pylephlebitis; it may occur frequently in the newborn, on account of the frequency of inflammation of the umbilical vein at that age, which inflammation is then easily transmitted to the vena portæ. We know nothing as to the influence of age and sex. We cannot deny that the prognosis must generally be unfavorable. As long as the diagnosis is doubtful, there can nothing be said of the treatment.

The above account has been translated from "Schmidt's Jahr. Bucher der in—and auslandischen Jesammten medicin," No. 8, 1847. This is, consequently, the latest inquiry on record into this rare disease. As the translator can find hardly any mention of inflammation of the vena portæ in any of the usual works on the practice of medicine, and as the observations are not sufficiently numerous yet to have any certain diagnosis, &c., of the same, and as, moreover, there is a discrepancy in relation to the pathology, symptomatology, &c., of the cases already published, he has considered it a service to the profession of this country, to translate also the leading features of the remarks on this disease, which are contained in the "Encycklopœdie der Gesammten Medicin von Carl Chr. Schmidt, Med. and Chir. Doctor," vol. 6., Leipzig, 1842.

"*Inflammation of the vena portæ*" says Dr. Eisenmann in the above work, "occurs upon the whole but rarely, yet there are a goodly number of observations at our command, namely, a case by *Bouilland*,* two by *Reynaud*,† one by *Dance*,‡ one by *Bonie*,§ one by *Balling*,‖ one by *Schoenlein*,¶ two by *Andral*,** one by *Aullier*,†† one by *Cruveilhier*,‡‡ and one by *Mohr*.§§ *Schoenlein* has also recently observed a case at Berlin. It is

* Archiv. Gener. 1823, Juin.

† Journ. Hebdom. II, and Revue Med. 1839.

‡ Archiv. Gener. 1828, Dec., 1829, Feb.—20 observations.

§ Clinique des Hopitan, 1829, May.—Bullet. des Sciences Med. xvi, 216.

‖ Zur Venenentzundung, page 310.

¶ *Baczynski* Diss. de Venæ Portarum Inflammatione, Zurich, 1838. Schmidt's Jahrb. xxii, 110.

** On these four cases compare *Baczynski's* Dissert.

†† Central Zeitung, 1840, Nov. 29. Schmidt's Jahrb. xxii, 110.

‡‡ On these four cases compare *Baczynski's* Dissert.

§§ Gentral Zeitung, 1840, No. 29. Schmidt's Jahrb. xxviii, 50.

also to be noticed, that those cases of inflammation of vena portæ are not included which are observed in newborn infants, where the inflammation proceeded from the umbilical vein.

The inflammation of the vena portæ can, like that of other veins, proceed from the inside of the vein and extend to the outside of the same; but the inflammation can also originate in the surrounding tissues, and extend itself to the external and from thence to the internal membrane of the vena portæ; and if, in *Reynaud's* case, the vena portæ and cava were closed externally by exæudation; if in *Aullier's* was found, in the vena portæ, blood of the consistence of cream, but in the liver, abscesses, and other vestiges of inflammation; if, finally, in *Cruveilheir's* case the cellular tissue of the vena portæ was infiltrated with pus; then we can well assume, that in these cases the inflammation proceeded from without to within, whilst in the cases of *Dance*, *Bonic*, *Balling*, and others, the course of development of the disease took its direction from within to without.

The anatomical changes and the physiological anomalies are the same with the vena portæ as with inflammation of other veins,* and it is added to it only the functional derangements of the vena portæ and of the liver. This inflammation can take an acute and a chronic course. *Baczynski* deduces from nine cases, the following picture of the acute inflammation of the vena portæ: (*a*) Inflammatory stage, local symptoms: sudden pain in the regio epigastrica and in the hypochondrium dextrum, without (?) obvious causes; this pain returns like colic, increases on pressure very much, and extends itself gradually over the whole abdomen; heat, deep (low?) in the hypochondrium; the abdomen is dense, full, or in the beginning retracted, or only moderately swelled; hard, but is not meteoric; veins of the abdominal parieties distended, extending thus to the chest and axilla. General symptoms: fever, which takes place sometimes before, sometimes with, and sometimes after the local symptoms; severe chill, (rigor) which lasts from one to two hours and is followed by heat; quick, soft, weak, and small pulse;

*Compare with this Dr. Waller's opinion on pages 1 and 2. Transl.

dry and turgescent skin; tongue dry and covered back with thick, white mucous; abdomen very warm; thirst and red fauces, continued heaviness of the head, vertigo, debility, anxiety and restlessness of mind, wakefulness, constipation, scanty, red urine with a sediment like brickdust. After a while appear difficulty of breathing, tossing, and an icteric hue of the skin. (*b*) Adynamic stage: it commences from the third to the eighth day of the disease. The first stage never lasts to the fourteenth day. The progress of the disease is frequently very obscure. Local symptoms: the pain and heat of the abdomen disappear entirely; a throbbing sensation in the abdomen, and sometimes in other parts of the body. The abdomen swells more. General and sympathetic symptoms: retching, vomiting of a black substance resembling dissolved soot, pressure on the abdomen produces stitches and retching, palpitation, irregular and unequal pulsation of the heart, great anxiety, the face is distorted and covered with perspiration, mouth, nostrils, and the trembling tongue, have a dark color, great debility, unconsciousness, anxious, staring eyes, dilated pupil, which was contracted, sopor, aoma with delirium, automatic motion of the hand to the abdomen, very small pulse, which cannot be counted any more. A great deal of dark blood runs from the anus shortly before death, the strength continues sinking, the countenance becomes hippocratic, the extremities are cold, and death takes place in the course of seven days."

Baczynski has either not observed, or has *omitted* to notice, the *chill* or *rigor* which announces the commencing suppuration.

"The *chronic form*, as described by *Baczynski*: Disagreeable weight in the scrobiculum cordis, a feeling as if every thing in the abdomen were arrested in its function. Little heat in the region of the liver; pain in that region from the commencement; abdomen somewhat swelled and painful on pressure: yellow hue of the skin; distention of the veins of the abdomen and extremities, then feeble febrile excitement, in the evening frequent alternations of chilliness and febrile heat; skin dry, temperature little elevated; pulse quick and soft, and again slow and weak. Dyspeptic symptoms, vomiting of dark green matter, mixed with blood; tardy stools;

urine scanty, red, and with brick-dust sediment; oppression of the chest, hawking. Abdominal distension and emaciation increases. Sometimes œdema. Strength diminishes, and the emaciation progresses, notwithstanding there is at times a good appetite. Hectic. Mild delirium. Death. The disease lasts from a month to a year."

We know but little, as yet, of the cause of primary pylephlebitis. "More frequent is secondary pylephlebitis, and this can arise in three different ways: (*a*) an inflammation of the liver can communicate itself to the vena portæ and penetrate its membranes; (*b*) an inflammation of the stomach, spleen intestinal canal, can penetrate to the roots of the vena portæ and can reach into the trunk and further; (*c*) deleterious substances, pus, or ichor can be absorbed in the stomach, intestinal canal, or spleen, and cause inflammation in the vena portæ. In the case observed by *Bonie*, there were syphilitic affections of the rectum and the bladder; the trunk of the vena portæ, from the place where it enters the liver to its last ramifications, was full of white, thick pus, and the walls were covered with pseudo-membranes. Could not here the pylephlebitis be produced by syphilitic pus?

The treatment of the inflammation of the vena portæ is similar to that of phlebitis generally. The secondary, however, requires a rational treatment of the primary affection; and against the suppurative fever, if it should manifest itself, should be instituted a disinfecting and conservative treatment.

ARTICLE II.

Intestinal Worms—their Effects, &c., in the Adult. By W. Matthews, M.D., of Putnam county, Indiana.

Professor McLean, in his recent course of lectures in Rush Medical College, remarked the infrequency of intestinal worms in the human subject in the western country

generally; but, from several years' observation, I am satisfied that this particular locality is an exception to the general rule. Here, intestinal worms—the ascaris lumbricoides to which I refer—are extremely common; indeed, not one child in three, I am very sure, arrives at the age of ten years without having suffered, more or less, from the morbid effects of invermination. Nor are adults exempt from these troublesome parasites. Within the last few years, numerous instances of verminous irritations in the adult have fallen under my observation.

An investigation into the causes which favor the more than usual generation of this species of worm—the lumbricoides—in particular localities and at particular times, might be a subject worthy a more extended notice than I can give it here. Some pathologists have, I believe, attempted to account for the almost universal prevalence of intestinal worms at certain seasons, and as confined to certain districts, by ascribing their *origin* to atmospheric influences. That atmospheric influences may *assist*, or act as a remote cause, in inducing that condition of the alimentary canal favorable to the production of worms, I have no doubt; but I imagine that this cause is, of itself, wholly inadequate to their evolution. Let intestinal worms originate how they may—whether from ova, or as many, I think rather fancifully, suppose, spontaneously, without a vital germ—all agree, I believe, that whatever deranges the prima via and induces indigestion, favors their production. Unwholesome, heavy, indigestible articles of diet too long continued, together with the malarial atmosphere under which we live, are the principal, perhaps only causes, which favor the origin and accumulation of worms in the human subject, in my opinion.

I may be allowed to state the following facts as confirmatory of this view, respecting the production of worms. A neighbor of mine, in the spring of the year 1846, lost, by death, a lot of five or six young hogs, under circumstances which led him to infer they had contracted a distemper, communicable by contagion. Happening to be present when one of the shoats died, I proceeded to open it immediately, and to my astonishment, was readily enabled to discover the cause of death, in an immense accumulation of

the lumbricoides, in the upper portion of the jejunum and in the stomach. About eighteen inches of this intestine was completely distended with worms, about one hundred and fifty, of an average length of eight inches, being congregated thus together. The intestine was completely gangrenous.

Upon further observation, the whole number was found to have died from the same cause as that just stated.

Now, upon enquiry, I was enabled to ascertain that these young hogs, all the offspring of one litter, had been treated in the following manner: they had been confined to a large wood-land pasture, and white oak acorns, of which an abundance was upon the ground to which they were confined, constituted their sole food. These acorns, though in a putrescent condition, occasioned by the alternate freezing and thawing to which they were subjected, were sufficiently nutritious to keep them in a thriving condition; but, unwholesome as they must have been, they were, doubtless, the cause which gave rise to a condition favorable to the production of these parasitic creatures, the amazing increase in whose number ultimating in the death of the annimals, partly, perhaps, from obstruction in the bowels, and partly, no doubt, from the morbid irritation which they induced. Now there can be scarcely a doubt but that persons—children more particularly—so circumstanced as to be placed upon a diet, although sufficiently nutritious, whose qualities are not well adapted to the digestive function, will not unfrequently favor the evolution of worms in the digestive apparatus itself. Indeed, these aberations of digestion seem to constitute a climate, so to speak, every way favorable for the sprouting and rapid maturation of worms. These suggestions being correct, it will readily be seen how a family, or a whole community, may suffer from simultaneous invermination. They live alike, upon the same articles of diet, the same atmosphere surrounds them, and these circumstances are unfavorable to the performance of healthful digestion; and this last circumstance, it will be remembered, favors the generation of these troublesome accompaniaments of bad digestion.

Having premised these remarks, it remains for me to indicate some of the more obscure symptoms as not uncommonly

met with in certain adult individuals, more especially those of the nervous temperament. And I cannot, perhaps, better illustrate these symptoms, than by narrating a few cases from my note book.

Case I.—Mrs. B., aged about 35, and mother of six children for several years previous to 1843, had suffered from often repeated hysterical paroxysms, many of which were of extreme violence. About this time I was called on to treat her. Gastro-intestinal irritation, with frequent fits of religious shouting, crying, &c., accompanied with irregular spasms, were the symptoms present. Stimulants of the anti-spasmodic class, purgatives, &c., were prescribed, but were almost immediately rejected by vomiting—the stomach being in an extremely irritable condition. She was ultimately blistered over the stomach, and it was only after the lapse of many days, that she partially regained her usual feeble health. These "fits" continued to recur, with increasing frequency, notwithstanding the remedies of a tonic nature prescribed for their prevention, until the fall of 1844, when I prescribed an anthelmintick, followed by a tonic plan of treatment. An immense number of lumbricoides were discharged; the patient rapidly regained her health, and has, in general, enjoyed very good health ever since.

Case II.—Mrs. N., aged, perhaps, about twenty-five, and mother of three children, suffered from symptoms of indigestion, accompanied with nervous palpitations, great anxiety, and prostration, in the autumn of the year 1844. These symptoms became aggravated, and there was added to them *ardor urinæ*, together with what I shall style, for want of a more significant term, *nuralgia* of the uterus itself, of a very distressing character. The patient was a prostitute, and at first I suspected she had contracted a gonorrhœa; but, satisfying myself that this was not the case, a prolapsus uteri was searched for, but not found to exist. These distressing symptoms, partially palliated by sedatives, with loss of appetite, emaciation, &c., continued to torment my patient for several weeks, notwithstanding the alteratives, cathartics, &c., with which she was being dosed all the while. At this stage of the disorder, I was, from some circumstance, led to suspect the existence of intestinal worms, and prescribed a vermi-

fuge. This, in the language of the nurse, expelled "all but a chamber-pot full" of the round worm. My patient regained her health rapidly, and, soon afterward, became pregnant by one of her numerous lovers!

Case III.—Miss B., a prostitute also, was placed under my care for treatment in the autumn of 1846. The history of this case is so similar, in every particular, to the last, that it would be but repetition to give it. The *ardor urinæ*, the *nuralgia* of the uterus, and the nervous symptoms, were all present; and, after much perplexity on my part, were relieved by the same means.

Case IV.—Mr. R., about twenty-five years of age, of excellent constitution, scarcely ever having experienced a day's sickness, in the spring of last year, found his health gradually declining. He was feeble, appetite capricious, tongue coated, bowels irregular, costiveness, alternately with diarrhœa. I was consulted. He took some medicines for these symptoms, and supposed himself somewhat benefitted by them; but they recurred again and again, and were again and again abated by a temporizing plan of treatment, but without permanent advantage. The passage of a worm or two from his bowels, induced me to advise an active anthelmintic, which, bringing away a large number of the common round worms, afforded him complete relief from all unpleasant symptoms, up to this time.

I might narrate many other cases in all respects similar to those already given; but I hope enough has been said under this head to put the young practitioner on his guard as to the proper manner of relieving certain cases, which, if practising in this country, must, not very infrequently, come under his management. If he be observing, when hysterical persons—and especially those of suspicious morals—fall under his care, he will, in general, be able, although the attendant symptoms may call the attention of both patient and friends to sympathetic complications remote from the seat of the disorder, to diagnose the existence of verminous irritation, if it be present. The expulsion, by vomiting or from the bowels, of a single worm, should excite his suspicion; and as anthelmintics may be given in almost all conditions of the system, they should be prescribed—even on the empirical principle,

if they do no good they will do no harm, for these are perplexing cases.

From what has been said, I would not be understood as contending that even a considerable number of hysterical complaints, as occurring in this vicinity, are the offspring of invermination; but my own observation warrants me in asserting that some of those obscure disorders, reckoned most commonly hysteria, are but the symptoms of verminous irritation; and, in a vast majority of instances, at least, intestinal worms date their existence *subsequently* to impaired digestion.

The treatment, then, of such cases as those above narrated, is at once manifest. The worms, though the *result* of primary disorder themselves, constitute a first indication in the treatment. A second indication is to restore to healthful play the digestive system; and a third is to avoid the *original remote cause*. A vermifuge is, in the first place, to be given. Though by no means ellegant, the following combination will be found very effectual: two drachms of finely pulverized radix spigelia, one drachm of finely pulverized seeds of the chenopodium, mixed with two ounces of a mixture of castor oil and the oil of turpentine, a portion of which is to be taken every two or three hours, until free action of the bowels ensues. The second indication is to be fulfilled by gentle tonics, cathartics, alteratives, &c. If borne, iron will be found extremely serviceable *now*. The third indication will be found more difficult of fulfilment than either of the preceding. The digestive system must be kept in good condition; to do which requires, however, not unfrequently more temperance and more dietetic restrictions than we can enforce our patients to observe. We are so constituted, that even slight, often repeated, violations of the laws of our being, subject us to inexpressible misery. And, unfortunately, the temptations to infract those laws are, to a comparatively uneducated and unrefined class of people—such as, I regret to say, too many of *us* are—stronger than the beautifully symmetrical laws of God. But it is the duty of every high-minded physician to do his might, to labor assiduously, not only to repair those breaches, the effects of the insulted laws of man's nature; but also to elevate him, both mentally and morally—thereby insuring to him the best possible condition of his physical frame.

ARTICLE III.

Retroversion and Anteversion of the Uterus. By JNO. EVANS, M.D., Professor of Obs., &c., in Rush Medical College.

RETROVERSION is the displacement next in frequency to prolapsion of the uterus. It may occur at any age of the patient after the organs of generation are developed, but is by far the most common during the early months of pregnancy.

The Causes of this dislocation may be divided into the predisposing, and the exciting. Any affection of the system producing debility and relaxation of the tissues, may be regarded as a constitutional predisposing cause, if existing in connection with those local changes in the relation of the parts concerned, termed the local causes. These are, great capacity of the pelvis, enlargements of the fundus of the uterus, elongations, or relaxations of the round and broad ligaments, and distention of the bladder, tumors, &c.

The exciting causes are violent exertions of any kind, as coughing, sneezing, efforts at stool, or in lifting, falls, &c., while the conditions above mentioned are present.

But, perhaps, the most common cause is, exertion while the bladder is distended with urine, and the uterus slightly enlarged by pregnancy. Indeed, it is a matter of surprise, when we observe the very lax attachment of the ligaments, and the loose manner in which the uterus floats in the pelvis, that these conditions should be present, without causing a retroversion in every case, upon violent exertion.

The Pathology of retroversion is plain and simple. The uterus is so changed from its natural position, that the fundus is pressed down below the promontory, and occupies the hollow of the sacrum, while the os tincæ is elevated above and rests on the symphysis pubes. By this position, the round and lateral ligaments are extended, and the vagina is thrown forward with the mouth of the uterus, so that in tracing its posterior wall upward, the finger passes over a tumor formed by the uterus, and is brought to the pubis. The rectum is compressed by the fundus, and the neck of the

bladder by the mouth of the womb, which, generally, gives rise to difficulties in evacuating urine and fæces, and at the same time, by the irritation of these parts, keeps up a more or less constant desire for it.

The malposition may, in the quiescent condition of the uterus, remain for a considerable length of time without giving rise to intolerable inconvenience, and adhesions are liable to form in cases of long standing, that will prevent reposition, which, in case of pregnancy, must necessarily give rise to abortion, about the fourth month, when the uterus becomes too large to remain in the pelvis, if not earlier.

As in the development of the uterus during the early months of gestation, the enlargement first takes place at the fundus, it is not surprising that we should have the displacement occurring most commonly at this period.

The displacement may occur in connection with diseases of the parts concerned, but, generally, these, unless they relax the attachments of the uterus, load the fundus by enlargements, or, in consequence of tumefaction, push it down, have nothing to do with it. It is, of itself, a purely mechanical derangement.

In those countries where the abdominal viscera are more frequently the seat of disease, as in the south and west, we should expect, both from the congestions and enlargements to which they are liable, and the relaxations produced in the uterine attachments, in common with other parts, that this malposition would be more common. And when to this is added the frequently laborious life of females in the west, necessitating them frequently to make violent exertions at lifting, &c., we may infer that here retroversion will be comparatively of frequent occurrence. But whether these inferences are sustained by facts or not, has not, as yet, been clearly made out by observation.

The Symptoms of retroversion of the uterus vary in the different conditions under which it occurs. As a general rule, the larger the uterus at the time, the greater the suffering attending it.

There is pain in the loins and sacral region, passing around the ilium to the pubes, produced by the extension of

the ligaments and vagina, and compression of other pelvic viscera—a desire to urinate, with a more or less complete retention of urine, produced by the irritation and compression of the neck of the bladder—often a tenesmus from the irritation and inability to evacuate the bowels, on account of the compression of the rectum—bearing down, resembling labor pains, produced by a sense of the presence of a large tumor, pressing on the perinæum. When it occurs suddenly, and produces much suffering, it is sometimes attended with fainting, paroxyms of hysteria, and frequently by vomiting. Inflammatory fever, with thirst, coated tongue, dry skin, quick pulse, and increased suffering, often supervenes. An examination, per vaginum, will disclose a tumor of greater or less size and density, according to the condition of the uterus, in the cavity of the sacrum, and either an absence of the os tincæ, or it situated against the symphysis pubes, and the parts will be pretty firmly fixed in this position.

The Diagnosis of retroversion will be easily made out, as there is no other affection that gives the same relation of the parts, as ascertained by an examination, per vaginum. A tumor in the cavity of the sacrum may resemble it; but the position and mobility of the os tincæ and corpus uteri will enable us to distinguish it from retroversion. The pain, suppression of urine, and sympathetic affections, may attend prolapsus or anteversion; but the os uteri, found by tracing the posterior wall of the vagina, will distinguish retroversion from them or any other possible condition.

The Terminations of retroversion are liable to be of the most serious character. The distension of the bladder from the retention of urine, produced by the pressure upon its neck or the urethra, which, perhaps, in some cases, from other causes, existed before the displacement, is liable to result in rupture, and a discharge of urine into the peritoneal cavity, which will be certainly fatal; or in the cellular tissue of the pelvis—scarcely a less dangerous accident, as extensive gangrene must necessarily follow. The large intestine is liable to become impacted in consequence of the pressure on the rectum.

The pressure produced by the uterus against the bladder and rectum, is liable, if long continued, to cause sloughing of these parts, of a most serious character.

An inflammation of the bladder, rectum, uterus, or vagina, and particularly of the ligaments, is liable to result in consequence of the distension and compression to which they are subjected.

In pregnant cases, especially in patients of an irritable system, abortion, with its attendant serious consequences, is liable to ensue; and where the retroversion is old and bound by adhesions, death sometimes results. This is certainly the fate of such a case, if abortion does not occur.

A case of retroversion, probably attended by adhesions, which produced three successive abortions, was reported by Dr. Golliday in the Illinois Med. and Surg. Journal, vol. II, No. 10, in all of which cases the patient did well. In the last case, the patient is stated to have gone to the seventh month of pregnancy, when abortion occurred spontaneously, or from the effects of efforts at reposition.

The adhesions, where the uterus is repeatedly subjected to distensions by pregnancy, might be absorbed, and eventually allow of reposition; and, on this account, we should not be hasty in our interference in such cases.

The Treatment of retroversion, as a general rule, is plain and easy, in all cases of recent occurrence. The indications are, to replace the uterus, retain it in its natural position, and meet any irritation or inflammatory symptoms by their appropriate anodyne or antiphlogistic remedies.

The facility with which the first indication can be fulfilled, will depend, to some extent, upon the size of the uterus, the capacity of the pelvis, the amount of inflammation, the condition of the rectum and bladder, the length of time that has elapsed since the displacement occurred, and the formation of adhesions between the uterus and other pelvic viscera, the most liable seat of which is between the fundus and the rectum.

If it be a recent case, there need be no fear of adhesions, and the reposition should be attempted at once. Before proceeding to the fulfillment of this indication, the condition

of the patient, in reference to irritation, fever, and inflammation, should be carefully observed. And, in case much evidence of irritation be present, either it should be allayed by the administration of an anodyne, or the chloroform or ether should be given.

If symptoms of inflamation, or if much fever be present, the operation may be safely premised by a free bleeding, in which case, also, on account of the tenderness of the parts to pressure, and the consequent pain produced, will it be more particularly advisable to use an anæsthetic agent. After evacuating the bladder by the use of the catheter, which will sometimes be a little difficult of introduction, on account of the pressure upon the urethra, but by using a male gum-elastic catheter with a stiff stilet, this can be pretty readily overcome, and the catheter can be passed up as high as is necessary, and after procuring a passage from the bowels by an injection, the attempt at reposition may be made.

In some cases this may be effected simply by pressing the fundus through the vagina upward, with one or two fingers, while the patient rests on her knees and breast, to remove the pressure of the abdominal viscera from the uterus, and prevent bearing down.

If this does not succeed readily, I would not pass the finger into the rectum as advised by some, for by it there would be no advantage over the former effort; but I would pass the hand at once into the vagina, and this can scarcely fail of success. The advantages of this procedure are plain; first, by distending the vagina laterally, it is contracted longitudinally, which has a tendency to draw the os tincæ down; second, by the whole hand the uterine tumor can be supported and pressed up by a much broader support than any other means, and hence there is less liability of disturbing the attachments of the ovum and producing abortion; third, with the hand introduced, you can carry the fundus up as far as is necessary for complete reposition.

On the 10th of April, 1847, I was called to see Mrs. ——, with all the symptoms of retroversion. She was near the fourth month of utero gestation, of capacious pelvis, large frame, and strong muscular form—had been in pretty good

general health, since she became pregnant, with the exception of one or two slight paroxysms of intermittent fever, within a few days. She had been laboring actively in her kitchen, and after lifting a heavy tub, was thrown into severe pain in the pelvic region, with constant desire to pass urine, without the ability of effecting a discharge.

I attempted a reposition by the fingers, but as the uterus was large, (nearly as large as is possible for it to be in retroversion), the fingers, on pressing the tumor, made too great an indentation to be safely persisted in. I, therefore, after preparing the hand by lubrication with oil, and softening it in warm water, gently passed it into the vagina, in the usual manner and, spreading it out as much as possible to support the uterus, pressed that organ to its proper place.

A slight irritative fever continued for a day or two but subsided after the operation of a cathartic, the bowels became regular, and the voiding of urine easy. On the 16th of September following, I attended her in labor at full term, when she was delivered of a healthy child.

If the retroversion be of long standing, the reposition must be made with much care, lest, if adhesions have formed, lacerations may be produced. Of this, the experienced operator can judge by the amount and manner of resistance offered to reposition. In such cases, attended with pregnancy, the only chance for relief is in abortion, which will often come on spontaneously, or in consequence of efforts at reduction. In some cases it is advised to rupture the membranes, and where the os uteri cannot be reached for this purpose, Dr. Hunter advised to evacuate the liquor amnii by puncturing the uterus through the vagina or rectum, with a small trochar and canula. This has, in several instances, been successfully practiced. Where the uterus is bound down by adhesions, it is better to let it be than run the risk of producing a more serious injury, by attempting to break them up.

After it is replaced, the uterus will generally remain in its proper position, if the causes that produced the displacement be sedulously avoided. Distention of the bladder and active exertion should be especially guarded against.

Where the uterus is growing from the development of an

ovum, it will soon be too large for a recurrence of the malposition to be possible. Under other circumstances, the use of a pessary may be servicable, by distending the vagina laterally, and contracting it longitudinally, thus holding the cervex uteri down, and by filling up, to some extent, the space in the cavity of the sacrum, into which the body of the uterus inclines to descend.

When debility attends the displacement, the appropriate tonic treatment for it should be adopted.

ANTEVERSION.

Anteversion is the reverse displacement to retroversion; the difference consisting in the uterus being thrown over in the opposite direction, so as to bring the fundus forward, and the os tincæ backward. It is extremely rare in its occurrence, as might be inferred from the anatomical relation of the parts concerned. The attachment of the bladder to the anterior wall of the vagina, and its elevation above this, between the body of the uterus and the pubes, shows a barrier in the way of the occurrence of this malposition, that will be rarely overcome.

The Causes of it are not so clearly defined. Prof. Meigs, of Philadelphia, thinks it depends on contraction of the round ligaments of the uterus. Tumors in the posterior part of the pelvis, and especially of the ovaries, or accumulations of fæces in the rectum and segmoid flexure of the colon, are liable to press the fundus uteri forward, and may thus produce it. It is necessary to this malposition, that the bladder be empty, and it is supposed that a slight enlargement at the fundus uteri favors it. We should, therefore, look for it soon after conception.

Violence or efforts, occurring when the parts are in either of the above conditions, may turn the uterus over forward.

The Symptoms of anteversion are, pain, a bearing down sensation, as in retroversion, though not so severe, and a difficulty in retaining urine, sometimes with pain in voiding it, though scarcely ever retention. An examination by the touch alone, will reveal the nature of the case. By this we

find a tumor against the anterior wall of the vagina, and the os tincæ carried far back toward or above the promontory of the sacrum.

The Diagnosis may readily be made out by a careful examination, per vaginum.

Anteversion has been mistaken for stone in the bladder, in consequence of the fundus pressing a tumor into the cavity of this viscus, which the sound strikes in searching for stone. Leveret mistook the only case of anteversion he saw, for stone, and did not discover his mistake until, after death from lithotomy, it was revealed by dissection.*

The greatest difficulty will be in distinguishing it from tumors in the pelvis; and, as has already been seen, they may both be present, in the relation of cause and effect. The existence of anteversion will be made out by tracing the anterior wall of the vagina, by which we find the body, cervex, and mouth of the uterus in succession, as we pass the finger upward and backward. The posterior wall of the vagina, being traceable forward, will distinguish retroversion.

Treatment.—Distension of the bladder is said frequently to relieve anteversion spontaneously, when existing during efforts at stool, &c. The reposition may be effected by pressing the fundus upward, above the pubes, with the fingers, while the patient is in a position to remove the pressure of the abdominal viscera from the pelvis, as recommended in the operation for retroversion.

The after treatment should be the same as for retroversion, except that the bladder may be kept pretty well distended with urine, and thus continually press the fundus back.

* Churchill's Diseases of Females, page 226.

Part 2.—Reviews.

ARTICLE I.

Elements of Pathology. By Alfred Stille, Lecturer on Pathology and the Practice of Medicine in the Philadelphia Medical Association, &c. Being No. II of the Medical Practitioners and Students' Library. pp. 483. Phila.: Lindsay & Blakiston. 1848. (From the Publishers.)

The subject of this volume is one that has, within the last few years, deservedly attracted an increased share of the attention of the profession. It is impossible that a physician should understand special diseases, without being familiar with the general principles of pathology; and as there is no concise work on the especial subject, in our language, save, perhaps, a translation of Chomel's work, that has recently been published in Boston, which we have not yet seen, it cannot be said that the work is uncalled for. But, of late, this question — whether a necessity exists or not for a new work—seems entirely to have been laid aside; and we may be accused of being behind the times for mentioning it, as book after book is made, of late, from precisely the same materials; shown up, to be sure, in a new style in each successive issue, without the question being raised of its necessity; there, certainly, being room for all new works that will sell. And, after all, we are not sure but this is correct; for, after we have gathered facts, for a long time, from an author, his style becomes familiar and dry, while, if they are given by another, they may have new interest. We, on this account, and for the reason that no one man can become pre-eminently qualified to teach in more than one or two departments of the profession, are decidedly opposed to the system which formerly obtained, but is going into disrepute, of having a whole medical library from the same author.

The system adopted by our publishers, of selecting an author for each subject, will give greater research and variety in style, thus furnishing grounds to look for a good and an interesting library.

The authors are all American, too—no small reason why the series should be patronized, as it is time we were becoming more national in this respect.

But to return to the work before us. We really believe it to be opportune in its appearance, and a most valuable treatise. Dr. Stille is a fluent and chaste writer, and is extensively familiar with the subject upon which he has written.

To show some parts of the work to our readers, and thus, by giving them a taste, sharpen their appetites for a full repast, when they shall purchase it, we proceed to make extracts and notice the manner in which each branch of the subject is treated.

The work is introduced by an excellent essay on the subject of medical truth, setting forth clearly, its nature, the difficulties in the way of arriving at it, and the only mode of useful and profitable investigation; this being by patient, correct, systematic, and extensive observation.

It is divided into four parts—the first treats of "Ætiology;" the second, of the "General Phenomena, Theory, and Classification of Diseases; General Diagnosis and Prognosis;" the third of "Semiology;" and the fourth, of "General Morbid Anatomy."

In the first part, are considered, as general predisposing causes, the influences of temperature, heat, cold, the seasons, the climates, cold, temperate, and warm, and acclimation. As special predisposing causes—hereditary predisposition, age, sex, temperament, idiosyncracy, habits of life and profession, food and drink, dress, fatigue, previous disease, the position of organs, &c., and sympathy. As general and special exciting causes—cold, pain and mental emotion, mechanical and chemical causes, and venom. As the specific causes of disease—infection, contagion, medical constitution, and endemic and epidemic influences.

In reference to heat, the author says, correctly, its deleterious influence is principally exerted when accompanied with humidity:

"In the latter case, the disposition to inaction which heat alone creates, is sensibly augmented; the skin, no longer able to part with the moisture of the body, and by its evaporation, to maintain a tolerable temperature, is continually bathed in perspiration; the fluid which would otherwise have escaped from this emunctory, is poured forth by the mucous membrane of the bowels, and the various forms of intestinal flux, diarrhœa, and dysentery, prevail. It is this association of atmospheric influences to which must be chiefly attributed that most fatal scourge of infancy in this country, the summer complaint, or *cholera infantum*. It is the same, also, which appears to be a principal element in the generation of those pestilential maladies which devastate the neighborhood of marshes, and certain other moist localities, although, as will be more fully shown hereafter, other agencies contribute to, and indeed determine this result. It is remarkable, that although hot, dry air predisposes to cerebral, cutaneous, and intestinal inflammations, the lungs should be nearly always exempt from disease in such an atmosphere, and scarcely less so in warm, and moist weather."

The necessity for activity in the functions of respiration for the production of heat, being absent, by which the lungs enjoy immunity from excitement, may account for this.

In reference to cold, our author says;

"In general, dry, cold air imparts to diseases an acute inflammatory type, while, on the other hand, a cold, moist atmosphere predisposes to chronic affections, or to those acute disorders which are peculiarly liable to become chronic, such as rheumatism and bronchitis; dropsies, with all their various organic causes, and all the forms of tubercular disease, are ordinary effects of this cause. In a word, the combination of cold with moisture is more prolific of disease than any other cause, or union of causes whatever."

Passing over the very judicious remarks of our author under the several heads above enumerated, we direct attention, more particularly, to his observations on the subject of infection.

Under this head, the author takes decided ground in favor of the doctrine of marsh malaria as the cause of remittent and intermittent fever, and other diseases, as is seen by the following extract:

"The insalubrity of the neighborhood of marshes, particularly on the side exposed to the wind sweeping over their surface, has been known in all ages, and its reality proved by the restoration of the sickly district to health, on the water of the marsh being carried off by drainage. In fact, wherever a rich, wet, and low soil, abounding with vegetable and animal matters undergoing decay, is exposed to a powerful sun, after repeated irrigations of inundations, remittent and intermittant fevers will prevail, and of a more malignant type as the heat is more intense. It is probably owing as well to the vast number of the exuviæ of insects which crowd the salt-water marshes, as to the high temperature of the air, of intertropical countries, that the mortality of the diseases occasioned by them is owing. But even in these situations, it is not so much during the heat of day, as after nightfall, that the infection is active, a circumstance which has been plausibly explained by supposing that the deleterious emanations being mixed with the moisture of the air, are kept diffused through it during the day, but when the coolness of evening succeeds, descend to the lower strata of the atmosphere, where they of course act with redoubled vigor.

"When the infectious locality is of small extent, and so situated that the effluvia accumulate within it, their power of generating disease is rendered so intense as sometimes to prove fatal almost immediately. This is especially true of emanations from putresent matter, such as is collected in sewers, privies, &c., but almost as rapid an action has been observed in the case of paludial exhalations. Pringle, in his work on diseases of the British army in Holland, relates that among the foraging parties sent out early in the morning, when the meadows and marshes on each side of the road were covered with a thick fog of offensive smell, several men were so suddenly taken with a phrensy, as to throw themselves from off their trusses into the water, imagining they were to swim to their quarters. But in general, centers of malarious infection are not of so malignant a nature. Their influence diminishes rapidly with the distance from them, even upon the surface of the earth, and still more rapidly above this level; on the other hand it is augmented wherever anything tends to arrest and confine the vitiated

air, such as cellars, the courts and lanes of towns, and narrow valleys.

"A high temperature tends to produce malarious diseases, chiefly when the air is loaded with moisture, a fact which goes far to favour the opinion that the infectious cause is something substantial, which cannot be supported and carried about in so rare a medium as dry air. It is further corroborated by another fact, viz.: that a calm state of the atmosphere is most favorable to the prevalence of malarious disorders, while a strong wind, especially if it be cold, abates or even puts an end to them. It may be added to these illustrations, that a wind blowing over an infected district may cause the prevalent disease to be experienced in regions where it was before unknown; that if a hill be situated in the direction towards which the wind sets steadily for some time, the people living upon the side nearest the infected locality are more likely to suffer than those who inhabit the intermediate country, and the residents on the further side of the hill may escape the noxious influence altogether. In the same manner walls, houses, running streams, long and winding streets, &c., have been known to form barriers to the progress of infectious disease in one or more directions."

The following quotation is what the author says on the specific character and modus operandi of miasm:

"By condensing the vapours arising in certain malarious districts, small portions of mucus, containing animal matter, ammonia, and hydrochlorate and carbonate of soda, have been obtained. This discovery would appear to countenance the hypothesis of Varro, that marshy emanations contain innumerable and invisible insects. Dr. Holland has, in our own time, revived this hypothesis, which he has illustrated in a style no less elegant than ingenious. Some maintain that heat and moisture, followed by a low temperature, conditions which do certainly exist in the neighborhood of marshes, are sufficient to account for the phenomena of malarious diseases; and however utenable such a position may be, it must be admitted that these conditions of temperature and humidity may act as concurrent causes, by diminishing the power of the system to resist the influence of the miasm which is alone capable of exciting the diseases in question.

"There has been a great deal of discussion, and there is still a great deal of doubt, in regard to the manner in which

infectious principles invade the economy. It is evident that there are three possible modes by which they may obtain entrance; through the skin, the alimentary canal, and the lungs. The cutaneous surface may be pretty safely considered as offering a barrier to their passage, so long as the epidermis is intact. The experiments of Bichat, which appeared to show that the odorous particles of a dissecting-room could be taken into the system through the skin, so as to be perceptible in the gas discharged from the bowels, are open to several objections; and those of Collard de Martigny, which seemed to demonstrate that the poisonous effects of carbonic acid gas might be produced by its absorption through the skin, have been contradicted by the results of others, conducted in the same manner. The mucous membrane of the bowels is protected, by its position, from contact with the atmosphere and the morbific particles suspended in it, except so far as these latter may become entangled in the food and drink; but there is neither any direct evidence of the reality of this mode of action, nor, judging from the small quantity of material that could be conveyed in the manner supposed, any probability in its favor.

"There remain, then, the lungs; and nearly all modern authorities agree that it is chiefly through them that infectious agents are introduced into economy. It is well remarked by Dr. Copland, that upon the respiratory surfaces the air may be said to undergo a process of digestion, certain elements or portions of it entering into the circulation, and certain others being given off which have served their purpose in the economy. This writer, however, considers that the morbid agents received into the lungs make their impression upon the organic system of nerves, and thus lay the foundation of the subsequent disease. Without denying the reality of this influence, in view of the very rapid effects sometimes produced by malaria, and of which an illustration has been given on a preceding page, it would appear more worthy of credit that the pernicious substance is absorbed into the blood, which it more or less quickly vitiates, and thus occasions the subsequent symptoms. Two considerations render this supposition probable: the one, that in the class of diseases now more particularly under notice, the blood undergoes sensible alterations; and the other, that in constitutional contagious affections, properly so called, and which have so close an analogy with infectious disorders, it is difficult to imagine any other mode of origin than through a change in the circulating fluid."

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"*Medical Constitution.*—The preceding remarks form a necessary introduction to a general notice of several remarkable modes in which infectious and contagious causes operate, or the circumstances under which they act upon a large number of persons. The first of these we will mention, is the medical epidemic constitution. This state has been erroneously defined the *appreciable* aggregate of meteorological conditions, during which diseases prevail epidemically. The phrase is synonymous with prevailing medical diathesis; it relates entirely to the peculiarities of the prevalent diseases, and incidentally alone, and that by way of explanation, to the existing state of the weather. It has been more correctly described as a general tendency, by virtue of which, nearly all diseases, at a particular time and place, no matter how different in seat and character, assume, to some extent, a common aspect. Thus, inflammations of the brain or bowels may both be complicated with bronchitis, which complication is then said to be the effect of the medical constitution. In like manner, when various diseases are attended with symptoms which indicate disorder of the liver, the medical constitution is said to be bilious, and we have bilious pneumonia, bilious pleurisy, bilious remittent fever, &c. So, too, the prevalent type of disease may be either inflammatory, adynamic, or ataxic; and thus it happens that an affection which, at one period, has been found amenable to a particular treatment, will, at another time, require an opposite management. Inflammations which last year may not only have borne, but seemed to require for their cure, the most profuse loss of blood, may, in the present, or the following year, be aggravated by moderate depletion, or even receive benefit from stimulating remedies. In connexion with this point, it may also be stated, that the alternate triumph and failure of the same remedy or class of remedies, has been observed even without there being any common feature in the diseases for which they were prescribed, or any, it would be more correct to say, which observation could detect.

"The medical constitution must not be confounded with epidemic disease, for the former is evinced by a common symptom or symptoms in numerous affections otherwise dissimilar to one another, the latter is a definite and peculiar malady. Yet during the prevalence of an epidemic, some one of its principal features is very apt to distinguish nearly all of the sporadic disorders which arise at the same time; so diarrhœa was an ordinary complication of most diseases during the prevalence of the cholera. In such cases it is fair to infer that the infectious cause of the medical constitution acquires unusual energy, not only capable of giving an im-

press to diseases generally, but of originating an independent malady."

This is all our author says on this subject.

Although, for the northern and eastern portions of our country, the omission to notice the malarial influence, as producing a peculiar medical constitution, may not be a matter of importance, yet, to the physician in the west or south, who sees, as a matter of daily observation, the effects of this wide-spread influence giving a caste to almost all the forms of disease that he encounters, it will seem very much like leaving out the essential point—like describing an ague and neglecting to mention its intermittent character. Indeed, to him, there is no point in pathology of more importance than this influence. In vain have we searched the work before us in hopes of finding, somewhere, a full account of this influence in modifying diseases of other types than intermittent and remittent fevers.

Excellent as we regard the work before us in most respects, we could not find a more striking illustration of the importance to students, who design practicing medicine in the west and south, of *there* studying the pathology of disease, than the omission to which we refer in this, the latest and best elementary work on pathology. We know that in mentioning this subject, we are treading on ground that has been ridiculed if not forbidden by the savans of the east; and assuming a position that is said to have been often refuted, &c., but we are told by our author, in his introductory essay, that "Three precepts may therefore be laid down as fundamental, and essential in all researches after medical truth: 1st. That the cases must be observed and recorded honestly, minutely, and fully. 2d. That they must be very numerous, the more so the better. 3d. That they must be comparable. It is very true that these conditions are not easily fulfilled; the labor, the humiliation of intellectual pride, the length of time, the weariness of a pursuit so nearly mechanical, are all obstacles in the way, and not easily surmounted. But there is no royal road to truth!" And if all this be true, and that it is, no one can doubt, then, when we

have no pathological works setting forth, fully and accurately, the peculiarities of disease in an extensive region of country, the only opportunities for becoming acquainted with them are, to receive instruction from those who are familiar with those peculiarities, and by observing them personally. No one ought to contend that the general characters of a special disease are not the same; but all ought to admit, as our author abundantly teaches, that it may be modified, by various influences, so as to give it very different pathological aspects, and cause it to require very different modes of treatment.

What physician in the west does not know that pneumonia, here, is very apt to assume a decidedly remittent type, and, also, that, unless he adopts a different mode of treating such a case, from that he will find laid down by our eastern book makers for the treatment of pneumonia—a mode of treatment that shall, at the same time, combat the inflammation and jugulate the remittent fever—he will certainly have the privilege, if in Indiana, of laying in, as a preferred claim, his bill against the patient, "for attendance in his last illness." The same modifications, or similar ones, are found in connection with many other forms of disease—and modify their symptoms and the indications of cure.

But to return to our author. That he fully understands and admits the principle for which we are contending, is manifest from his remarks in reference to epidemic and endemic diseases. All we are sorry for is, that he has not recognized and treated, as ably as other points of pathology, the malarial influence and the diseased conditions arising from it.

"There is a feature, common to many epidemics, which must not pass without notice; it is the faculty which they have of taking the place, either in whole or in part, of the sporadic diseases which ordinarily occur in the regions where they prevail. It seems as if all morbid predispositions were, on such occasions, forced to assume the same mode of active development by the superior power of the epidemic influence. In a previous section the fact was mentioned, that if a number of persons were exposed to cold and humidity,

many among them would be affected differently, according to the organ most predisposed to disease in each; conversely, in the case before us, it would appear that in the infected district nearly every one must have his constitution modified in the same way by the morbid epidemic principle, since the same form of disease results, whatever be the character of the exciting cause which directly produces it. It is on this account that, in estimating the mortality of a place during an epidemic, the number of deaths arising from ordinary causes, during a corresponding season in other years, are not to be added to those produced by the epidemic; for it not unfrequently happens that although it may have destroyed a large number of individuals, yet the total mortality from all causes may very little exceed the average of other years, so completely has the prevalent disorder become a substitute for the rest. We are accustomed to lament the insecurity of life in certain cities which are annually or periodically visited by epidemics, and to suppose their average mortality greatly to exceed that of places which enjoy an immunity from this evil; but it results from the vital statistics of these cities that their total mortality is not greater than that of others, and that if they suffer more from epidemic disorders, fewer of their inhabitants die of sporadic disease."

In part second, we have considered the type, duration, stages, terminations, and seat of disease.

Here, again, we find the continued, the intermittent, and remittent types referred to without an allusion to the very common case, in the west, of the continued disease being rendered both remittent and intermittent, as respects many of the essential features of the case, by the malarial influence.

In speaking of the terminations of disease, our author contends for the doctrine of critical phenomena, such as hemorrhages, sweating, certain states of the urine, effusions from the bowels, and other mucous surfaces, &c., as marking the terminations. Though his remarks are generally judicious, we think he attaches too much importance to these phenomena as signs. He even thinks the doctrine of critical days worthy of two or three pages.

The next point that comes up is, the theory of disease, and after a statement of the doctrines of the materialists, the

vitalists, the humoralists, and the solidists, he closes the chapter with the following very judicious remarks, which we commend to the advocates of the different exclusive doctrines set forth:

"In the midst of these various theories of the origin of disease, the rational inquirer must be seriously embarrassed, if called upon to adopt some one of them exclusively; but if he has taken as his guide the rule of incorporating nothing into his scientific creed, but what results from a strict induction of facts, his perplexity need not be prolonged. He will then find that each theory rests upon a certain number of truths, but none upon a sufficient number to give it stability. He must speedily recognise the fact that a large number of the phenomena of life are explicable by chemical laws, and by them only, but that, at the same time, these laws are maintained in operation by the superintendence of vitality, a power which thus not only sustains them, but also upon certain occasion subverts them. He must also perceive that some functions are performed according to purely mechanical laws, but that their moving power is the principle of life, a force possessed of attributes different from those of gravity, elasticity, and the other mechanical powers. He must admit that, in some diseases, the starting point is in the solids, as where they are injured by violence; but he must, at the same time, acknowledge that not a few maladies called general, are directly owing to the introduction of some foreign matter into the blood-vessels, and do therefore originate in the fluids. He cannot deny that, even in the first-mentioned case, the blood speedly undergoes an alteration which is proportioned to the local hurt, and must, with better reason, be accepted as the cause of the general symptoms, than the local lesion itself; and that in the second case the original alteration of the fluids is usually followed by a more or less general change of structure in the solids. Finally, he cannot refuse to believe, that some affections commence by an impression upon the mind, the senses, or the general sensibility; but that amongst all of these, scarcely one remains confined to the system where it originated, but sooner or later implicates the rest. In a word, he beholds in man, a machine indeed, but one composed of various materials, which unlike those of other machines, are perpetually acting and reacting on one another; not only an aggregate of reacting elements, but one endowed with life, a power to which the ordinary laws of those elements are wholly subordinated, and whose own

mode of being and laws are wrapped in profound mystery; not only a living animal, but a rational one, possessed of a soul, which, with peculiar faculties and susceptibilities, is capable of modifying the usual succession of phenomena resulting from the co-operation or conflict of the chemical, mechanical, and vital laws which govern the merely animal portion of the creature."

Chapter third speaks of general nosology. After a brief reference to the nosology of Cullen and Pinel, and the advantages of classification in affording facilities for studying disease, the author comes to the following conclusion, the correctness of which is generally admitted, and has caused the general neglect, of late, of nosological arrrangements in the study of disease.

"Yet, it should not be forgotten, that every nosological system is, to a great extent, artificial; and that it is rather an instrument for discovering truth, than in itself an expression of truth. None that has ever yet been devised, and it may safely be asserted, none yet to be invented, can so arrange diseases, that all shall be included in perfectly distinct groups. Some will be found which have an equally close relationship with several classes, and cannot, therefore, be included in a particular one, without a violation of the first principles upon which the classification is formed."

Chapter fourth treats of diagnosis, in which a mode of investigating and noting a case of disease is laid down which, if followed, would save much error; and its sad consequences, both on the patient and, in turn, the profession, would be avoided. The chapter goes on to give the modes of, and the means used in, physical examination. The following will show the manner in which the subject is treated:

"Pressure, which determines the *resistance* of a part by means of the hand, and palpation, or the act of handling, whereby is received whatever information the sense of *touch* can communicate, may be considered together, because usually associated in practice, although the one may be employed without the other. *Pressure* is applied with the whole hand, or with one or more fingers only, according to the extent of the surface examined, and the rapidity of the intended movement. It is employed to ascertain the degree of hardness in

inflammation and œdema of the cellular tissue; the resistance of the walls of the abdomen, when distended by tumors, liquids, or gas; their relaxation after the evacuation of the contents of this cavity; and the presence of a solid body within a liquid abdominal effusion. An example of the sort last mentioned is presented by enlargement of the liver in ascites. By no other means can the projection of this organ below the false ribs be so well determined. The hand, or the ends of the fingers are pressed firmly over the point examined, and then thrust inward with a short, quick movement; if the liver lies near the surface, the layer of liquid between it and the integuments being suddenly displaced, the fingers impinge upon the solid viscus beneath. A similar movement communicated to the patella, in effusions within the knee-joint, will cause it to strike the condyles with a smart shock, and thus indicate the degree of the effusion.

"Pressure renders valuable assistance in determining the seat and degree of pain, and often detects its existence where the patient does not anticipate that it will be found. Some sorts of pain, those which depend upon inflammation, are aggravated by pressure in whatever manner it may be made, but others of the neuralgic and spasmodic kind are increased by pressure made over a small space, and usually soothed by the steady weight of the whole hand. The pain of abdominal inflammation, and that of colic, are with much certainty distinguished in this manner. Pressure, in like manner, may show a loss of sensibility on the part to which it is applied; pinching the integuments is the best mode of employing it for this purpose. It is also a valuable means of ascertaining the activity of the circulation in the extreme vessels; for when the blood moves languidly the pinkish colour of the skin returns but slowly after pressure made by the end of a finger is removed, while in scarlet fever, erysipelas, and other active cutaneous inflammations, the eye can scarcely follow the movement of the blood, so instantaneously does it efface the white spot made by the finger. When blood is effused by points in the skin, it is sometimes difficult to distinguish them from certain popular eruptions; but the latter always disappear on pressure, while the former become more distinct, from their contrast with the surrounding surface, which is rendered pale by its momentary loss of blood."

Palpation, or feeling for disease, the touch, the use of the speculum, succussion, percussion, auscultation, and the use

of the microscope and chemical tests are brought severally under consideration.

We are inclined to think our author underrates the value of the microscope in detecting disease. The revelations which this instrument is making in reference to the physiological conditions and nature of the different parts of the body, seem to us clearly to point to great and important discoveries that are to follow from its use in the investigation of disease. The difficulties and uncertainties referred to may all have their origin in bad instruments, and awkward or careless observations.

The following are his remarks:

"The use of the *microscope* in pathological investigations is an art so difficult, that none but those who have especially, and for a long time, cultivated it, can depend upon the correctness of their observations, or estimate justly the phenomena they witness. On this account it can never become, like the methods heretofore discussed, of habitual employment in ordinary practice, even were the points of pathology which it is capable of elucidating much more numerous than they really are. The sphere of usefulness of the microscope is almost entirely limited to distinguishing the proximate elements of the body from one another, where these latter actually possess marked characters; but, according even to some of those most expert in its management, it is incapable of showing any differences between the particles of some very dissimilar bodies, such as pus and mucus, or tubercle and cancer. Without granting that such difficulties exist in the degree alleged, or that they are insurmountable, it must still be admitted that the value of the microscope is less questionable as a means of detecting crystallizable products in the urine, when they exist there in such small quantities as to elude chemical analysis; or animalcules in the sperm; or, when employed in the simple form of an ordinary magnifying glass, as a mode of detecting or identifying, the various minute insects and entozoa which infest the human body. Whatever pathological results have been obtained through the microscope will be mentioned hereafter."

The remarks of our author on the subject of which it has been satirically said

"Prognosis is the doctor's guessing,"

are appropriate, showing clearly the importance of it to the comfort and welfare of the patient and his friends, the difficulties attending it, and that it can only be elevated above the description in the Pindaric line above quoted, by a thorough acquaintance with diagnosis, and the nature and course of disease.

Preliminary to part third, on semiology, the symptoms and signs of disease are defined, the varieties of symptoms, and the value of semiolgy discussed.

Symptoms are the phenomena of disease simply, which may become signs when used to denote its existence or character. All facts that do this are signs.

"Symptoms are of various kinds. An important division is into *local* and *general;* the former manifesting themselves in some particular locality, the latter in nearly every part of the economy at once. To these may be added *sympathetic* symptoms, which are indeed local, but developed at some point distant from that primitively affected, and dependent upon its disorder for their existence. Thus in inflammation of the testicles, pain, redness, and swelling, are local symptoms, fever in general, and tumefaction of the parotid gland when it occurs, a sympathetic symptom. But, in strictness, there is no real difference between general and sympathetic symptoms, except that the former take place in systems which prevade the whole body, as the skin, the blood-vessels, &c., while the latter are evinced by organs of more limited extent. The connecting link between a local malady and its general symptoms is quite as obscure, as that which gives rise to the sympathetic disorders peculiar to any disease.

"*Premonitory* symptoms are those which usher in a disease, and which indeed form part of it; but, as several amongst them, such as chill, fever, debility, headache, &c., are common to the invasion of numerous maladies, they are usually spoken of as if they did not belong to the attack which is about to follow.

"A *Pathognomonic* symptom is one that is characteristic of a disease, and, although alone, indicates its nature, because it exists in no other affection. Symptoms of this sort are very few indeed, and in every case, perhaps, consist in some *physical* accident or attendant of the malady. The discharge of worms is of course a certain sign of verminous disorder;

that of false membrane from the larynx, of croup; that of calculi from the bladder, of lithiasis; the detection of the acarus scabiei is conclusive of the itch; &c. But there are, in each of several affections, a few symptoms which taken together may be regarded as characteristic, or so strongly indicative of a particular disorder as to leave but little room for doubt. An acquaintance with these is all-important in practice, since it at once leads the physician to a probable diagnosis, and directs him to the particular points upon which his subsequent examination should chiefly bear. Thus if he find that there is cough, stitch in the side, rusty and tenacious sputa, and crepitant rhonchus, he can have but little doubt that the case is one of pneumonia; or if he observes fear, præcordial oppression, and a rubbing or to-and-fro sound over the heart, he may feel assured that he has before him a case of pericarditis. Just in proportion to the minuteness with which smyptoms are studied, and the accuracy of the value assigned to them, will these characteristics of disease become more and more certain, and diagnosis be divested of its difficulties."

Chapter first treats of signs from the exterior of the body as manifested by the position, color, temperature, &c.

In reference to cold, our author says:

"A chill occurring in the course of a disease which is not paroxysmal, is generally a sign, either of an intercurrent inflammation, or of the occurrence of suppuration in a part already inflamed, and is, therefore, of evil augury. Thus, in the progress of continued fevers, such an occurrence renders it probable that an attack of pneumonia, pleurisy, pericarditis, endo-carditis, or meningeal inflammation, is about to take place; during the decline of typhoid fever, a severe chill is usually accompanied with abdominal pain, and is then a sign of peritonitis from perforation; in the puerperal state, this phenomenon may accompany the establishment of the lacteal secretion, or, if the abdomen become tender at the same time, metro-peritonitis may be anticipated; at a somewhat later epoch, it is more likely to threaten an attack of phlegmasia dolens, or the formation of an abscess in the mamma. After wounds, a rigor may precede the appearance of erysipelas, or inflammation of the veins, or the ordinary consequence of traumatic phlebitis, the formation of purulent deposits in the lungs, brain, liver, or other viscus. In the course of all parenchymatous inflamations, a

chill denotes the advent of the suppurative stage. This is seen in simple phlegmon, and in pneumonia. A like occurrence in phlegmasiæ of the serous membranes is said to announce that pus instead of serum has begun to be secreted. The daily recurrence of a slight chill, followed by fever and sweat, when it takes place in a chronic affection marked by debility and wasting, is called *hectic* fever, and if it attends organic disease, shows that the fatal issue of the attack is approaching. It does not, however, follow that hectic is always a fatal omen. It may occur in chronic bronchitis, in empyema, and in large external suppurations, and yet the patient recover."

Here, again, we find the important omission to notice that, during the course of various diseases in malarious districts —and that not occasionally but frequently—"a slight chill followed by fever," daily, or on every other day, may occur as the effect of the malarious influence, which, according to the above, would be regarded as evidence of suppuration or hectic fever.

We have now under treatment a patient who was, a few days ago, attacked with a violent inflammation of the right lung, which was subdued by free bleeding, nauseating, cathartics, diaphoretics, anodynes, blistering, &c., but, as the fever and pain subsided, and the patient was able to take a full inspiration with less suffering, there occurred each day, at about noon, a sensation of chileness, followed by an increase of the febrile action, that lasted until the latter part of the night.

We gave her a few doses of quinine in addition to the treatment indicated by the pneumonia, and she is rapidly convalescing.

We do not mention this as a rare occurrence, for most of our readers witness such cases continually; but simply as an illustration.

We next have the signs from the head, face and neck. We quote the entire clause, in reference to the eyes.

"*The eyes and their appendages.*—The eyelids, like other muscular parts, are feebly moved in low fevers, and nearly conceal the ball of the eye: they not only hide it, but strongly

oppose being opened in those forms of ophthalmia which are attended with intolerance of light. In paralysis of the portio dura, the orbicularis ceases to contract, the lids remain open, and expose the parts beneath to the irritation of the air and dust, which soon excites severe inflammation. Paralysis of the third pair deprives the upper lid of motion, and effectually shuts out light from the eye. If this condition co-exist with loss of power on the opposite side of the body, cerebral disease may be inferred. Otherwise it may be owing to a blow upon the superciliary ridge, or to rheumatism of the levator muscle, or to a tumour or other disease within the orbit. An open state of the eyelids in sleep may be owing to spasm of the levatores; some writers have attributed it in children to verminous disease, but many individuals in perfect health habitually sleep with their eyes half open.

"The tears, instead of being absorbed by the punctæ lachrymales, may run down upon the cheek. This indicates, usually, obstruction of the lachymal duct. It occurs at intervals, when the nerves around the eye are attacked with neuralgia; commencing inflammation of the conjunctiva, also excites a profuse flow of tears. The accumulation and hardening of the palpebral mucus upon the edges of the lids indicates an extreme degree of prostration.

"The expression of the eye, and its changes in position, form, color, brightness, and power of vision, possess a very decided interest in connection with the present subject. The eyes are unusually bright during high fever with maniacal delirium, but dull and hazy in low fevers, and all affections in which there is sluggishness of the intellect or stupor. The cornea becomes still more completely clouded upon the approach of death, and often flakes of mucus partially obscure its surface. Immobility of the eyes may depend either upon paralysis of their muscles, or upon nervous spasm. It rarely happens that both eyes are paralyzed, except from extensive disease within the brain; cerebral disorganization, whether occurring near the orbit, or in the neighborhood of the roots of the third, fourth, and sixth nerves, is more apt to paralyze the muscles of only one eye. Fixedness of the eyes is observed in some inflammatory affections of the brain, along with rigid and open lids, and constitutes what is called *extrasis;* in cataleptic fits the eyelids remain open, and the eyes, like the rest of the body, are immovable. In epilepsy, chorea, and other true convulsive diseases, the movements of the eyes are rapid, irregular, and often distorted.

"Squinting, or *strabismus*, besides being natural, or acquired by imitation, and so far of no importance as a sign, may depend upon disease within the cranium, or in the orbit. Con-

joined with cerebral symptoms, it is of most unfavorable significance in adults, but far less so in young children, in whom squinting may arise from various causes unconnected with disease involving life. Tumors, &c., of the orbit often produced strabismus either by pushing the ball of the eye to one side, or by paralyzing a portion of the muscles. Rheumatism of those parts occasionally induces squinting. In a case of the sort under the writer's care, the eye did not regain its natural position for several months.

"Morbid prominence of the eye depends upon the turgid state of structures lying behind it, and often conveys a deceptive impression of the size of the organ. Protrusion of the eye, when gradual and permanent, is a sign of a tumor developed behind the eyeball, as enlargement of the lachrymal gland; encysted, fatty, bony, or cancerous tumors; aneurisms, and other tumours extending from the cerebral, nasal, or maxillary cavities, into the orbit; an effusion of blood behind the ball; and finally, inflammation of the cellular tissue at the bottom of the orbit. The eyes are hollow and sunken in all cases of general emaciation, owing to the removal of the layer of fat at the bottom of the orbit, and is of no further significance than as it marks the progress of emaciation. It is frequently very striking after sudden and exhausting discharges, such as diarrhœa and venereal excesses, although the general bulk of the body may not seem to be diminished.

"Vascularity of the conjunctiva frequently accompanies inflammation and congestion of the brain, but is more strongly marked when the membrane is itself inflamed. The sclerotic coat is usually the part which first becomes yellow in jaundice; in phthisis it acquires a pearly whiteness. In rheumatic ophthalmia and irritis it is marked by a radiated redness around its junction with the cornea. Ulcers of this latter tissue are most apt to occur in scrofulous persons, either from direct injury or after small-pox, and to leave behind them opaque cicatrices. Discoloration of the iris, and a fibrinous deposit upon it, with irregularity of the pupil, are signs of iritis. In the syphilitic form of this inflammation the pupil is said to be drawn upwards and inwards.

"The humours of the eye undergo a real or apparent change of color in several diseases. The equeous humor may be mingled with pus; the crystallie become opaque and of a white or buff color; and the vitreous humor sometimes appears green. The last-named hue is merely apparent, and is believed to be caused by the reflection of the blue of the choroid coat through an amber-colored lens, these two colors by their union producing green. The pupil

is generally dilated when sight is impaired by imperfection of the visual power, or by central opacity of the lens. The former state attends the various forms of amaurosis, and many cases of diseased brain without active inflammation. Exaltation of the functions of the brain and of the retina, most commonly occasions contraction of the pupil. The action of certain medicines on the pupil should be kept in mind. It contracts under the influence of opium, but is widely dilated by stramonium and balladonna."

The signs from the digestive apparatus are admirably discussed; and as it is the universal custom of physicians in examining patients to look at the tongue, principally to see whether it is much coated or not, and as we believe but little evidence is given of the existence or character of disease from the coating, we quote what our author says in reference to it:

"The tongue is *pale* whenever the blood has lost its normal proportion of red globules, as in hemorrhage chlorosis, in chronic inflammation also of the intestinal canal, unattended with much fever. A bright *red* color of the tongue is found in all violent inflammations, but especially in those of the upper portion of the digestive tube. Sometimes, as in scarlatina, the redness is not uniform, but shows itself in disseminated points, which are the turgid papillæ, projecting through a white coating of mucus; or this color may be confined to the sides and tip of the organ, while its centre is whitish. A moderate coating, whether white or yellowish, has generally been supposed to indicate accumulation of mucous or bilous matters in the stomach, and a red, dry, and glazed tongue, chronic inflammation of the intestinal canal. But these signs, as well as most of those derived from the presence, or the peculiar characters of the coating, are very fallacious. M. Louis found that redness of the tongue existed with equal frequency in phthisical patients who had no lesion of the stomach, and in those of them in whom this organ was extensively diseased. A similar result was arrived at by this author in regard to the state of the tongue in typhoid fever.

"The gradual disappearance of the coating from the circumference towards the centre of the tongue, is a favorable sign, and, in acute diseases, marks the commencement of convalescence. This process is sometimes arrested, and the

tongue becomes dry and red upon the occurrence of some inflammatory complication, but the change may also depend upon too great strictness of the patient's diet, for the more favorable condition has often been found to return upon the cautious administration of more nutritious food. The tongue, like other parts within the mouth, may become the seat of membranous formations; whenever this occurs as a complication, either in acute or chronic disorders, and along with great exhaustion, it is a most unfavorable sign. Ulcers of the various sorts above described, aphthæ, and the postules of small-pox, are also met with upon the tongue."

We next have a very judicious account of the signs of disease furnished by swallowing, the appetite, nausea, vomiting, defacation, &c. In reference to the last mentioned, the following will probably bring to mind a frequent neglect on the part of almost every practitioner:

"The inspection of the *alvine evacuations* is of great utility in practical medicine. It is too much the habit, at present, to omit their examination altogether, on account of its repulsiveness, and the difficulty of effecting it, either in private or public practice; and this habit has induced the still more blameable one, of neglecting to make proper inquiries on the subject."

The signs derived from the examination of the alvine evacuations are given under the heads of consistence, color, serous or mucous character, evidence of digestion and lientery, odor, &c.

The genito-urinary apparatus gives some important signs of disease; but of these, those derived from the urine are, by far, the most important in reference to which our author is full and explicit. We can give but the following brief summary:

"To complete this portion of the present subject, it remains to point out the semeiological value of the symptoms which have been described. Profuse and chronic discharges of urine, containing sugar, are characteristic of diabetes; a like abundance, of a nonsaccharine fluid, indicates the disease variously denominated diabetes, insipidus, hydruria, and poly-

dipsia. Clear and transparent urine, containing neither blood nor mucus—frothing when agitated, and coagulating on the application of nitric acid and heat—is albuminous, and, in chronic disease, indicates granular degeneration of the kidneys. During the first stage of Bright's disease, the urine contains blood corpuscles. Urine made green by the addition of nitric acid, contains the coloring matter of the bile. Crystals, a gritty sediment, and calculi, in the urine, announce the existence of some one of the forms of gravel, which is to be determined more precisely by the methods above described. Hydatids, in this fluid, generally proceed from a cyst in the kidneys.

"Mucus in the urine, if in considerable quantity, is generally owing to visical catarrh, or to enlargement of the prostate gland. Pus may be derived from inflammation of the pelvis of the kidney, (*pyelitis*,) or from that of the lining membrane of any part of the urinary passages, or from an abscess of the kidney, or postate gland; and when sanious, fœtid, and bloody, it is almost certainly indicative of malignant disease of the bladder. Blood in the urine is commonly due either to inflammation of the kidney, to calculous concretions in its pelvis, or to erosion of a vessel in the bladder. It also frequently accompanies the course of a variety of acute and dangerous diseases. The urine in small-pox, for instance, is often bloody. So is it in purpuro, in typhoid fever of bad type, in scorbutus, in acute anasarca from exposure to cold, &c. It may even occur as a distinct affection, without any general or associated symptoms. The manner in which pus and blood are voided, is of consequence in diagnosis. If they are discharged with the commencement of the stream, it may be presumed that they are formed in the urethra. If they accompany the conclusion only of the discharge, they are usually regarded as proceeding from vesical disease, and, if intimately mixed with the urine, from the kidney. But it is evident that the value of this distinction is doubtful; for, whether the bloody or purulent discharge proceed from the bladder or the kidney, it will, if the patient remain at rest, be voided only at the conclusion of urination; and if he be in motion, it will mix with, and accompany in its emission, all the urine contained in the bladder. Bodies, looking like earth-worms, are sometimes passed from the bladder. They are coagula of blood, moulded in the ureters. They generally give rise, while in these canals, to the symptoms of nephritic colic, or of a fit of the gravel.

Frequent calls to urinate may be owing to a large increase of the renal secretion, and, when attended with pain, to a concentrated state of the urine,—to inflammation of the

bladder—the ingestion or absorption of the active principle of cantharides, or of turpentine; to the presence of a calculus in the bladder, to enlargement of the prostate gland, to pressure of some adjacent organ or tumour, and to an excited state of the nervous system. Infrequency of voiding the urine depends, in disease at least, either upon its scanty secretion, (ischuria, suppression) or its retention in the bladder. Two forms of the latter are to be distinguished: the one in which a physical obstacle prevents the escape of the urine, and the other in which the patient's sensibility is so blunted that he is unconscious of the distention of his bladder. In the latter case, when a certain amount of urine is collected, all beyond that quantity forces a passage, and there seems to be incontinence, when there is in reality retention. In paraplegia, the amount thus retained becomes gradually less and less, and at last the urine escapes from the urethra almost as fast as it is poured into the bladder. Such incontinence is also not unusual after operations for the removal of stone in the bladder, especially when the patients are very young. A twisted, forked, or thin stream of urine, is commonly indicative of stricture of the urethra; it may, however, be caused by a fragment of stone, or other foreign body, in this canal."

We have already devoted so much space to the work that it will be impossible to notice the remaining portion as fully as that we have given.

The signs derivable from the nervous system, are both interesting and important; but many of them are quite vague and uncertain.

Those derived from the circulatory apparatus are, after a brief reference to the physiology of the heart, arteries, and veins, considered in relation to their impulses and auscultatory sounds.

The last apparatus, and it is one from which the signs are well laid down, is the respiratory.

Part fourth, on general morbid anatomy, is introduced by rules for making and noting post mortem examinations.

This is a most important matter; for so very few of our physicians are acquainted with it that, when *called upon* to make such examinations—for they scarcely ever ask the privilege—they know so little of the proper mode of conducting

it, that it would about as well be omitted, for any information that they gain by it.

The rules are too lengthy for an insertion here, but ought to be observed by all physicians who make examinations with a view of deriving information, in morbid anatomy, from them.

We extract, from morbid anatomy of the blood, the following:

"Pregnancy, although a physiological condition, induces remarkable changes in the composition of the blood. It has long been known, that a degree of plethora sometimes accompanies this state, which requires, for it is relieved by, depletion. When, however, the blood of pregnant females came to be examined, it was found to be generally impoverished: that is, to contain a diminished proportion of globules. The same observers who determined this fact, also concluded from their experiments in cases of plethora unconnected with pregnancy, that in plethora the proportion of globules is increased, and that the symptoms of the affection depend upon this increase, and not on any augmentation of the mass of the blood, as was previously believed. They found, therefore, the fact, that pregnant females are subject to symptoms of plethora, one of difficult solution. As will be presently shown, the proportion of globules in plethora is *not* increased, and the plethoric symptoms depend upon over-distention of the vessels. This distention may take place under any circumstances of the composition of the blood; and that it does occur in pregnancy, is abundantly proved by the turgidness of the vessels and all the tissues, the headache, disorders of vision, heaviness, vertigo, &c., which sometimes attend it. But when blood is drawn from a pregnant female, it is found that the mean proportion of the globules does not exceed 112-6, and that this change becomes more marked as gestation advances. At the same time, the quantity of fibrin either remains normal, or is slightly augmented. Pregnancy, then, is allied to plethora as well as to anemia. In it these two conditions may actually coexist, if the meaning of the latter is restricted, as it usually is, to a deficiency in the proportion of globules in the blood.

"No matter what the disease in which the blood has been examined, this fluid has uniformly been found to undergo some change. The proportion of fibrin varies according to the nature of the disease; but, independently of this condition, certain changes rarely fail to take place. These are, a

marked diminution of the globules; one, less in degree, of the albumen of the serum; and an increase of the fatty matters, particularly of the cholesterin. It is not easy to decide whether these alterations of the circulating fluid are owing directly to the disease in every case, or to the diet which, in acute affections, cuts off the supply of nutritive materials, and, by suspending digestion, makes smaller demands upon the liver, and allows the cholesterin to be retained in the blood. In chronic maladies, alterations of the blood take place more slowly, but are, on the other hand, more complete. In either class of disorders, the changes are greatly hastened by depletion; after each bleeding, the blood grows more watery, and its globules are sensibly diminished, but its fibrin undergoes no change. Becquerel and Rodier give the average quantities of the several elements of the blood in persons who had been bled three times. In these cases the proportion of globules fell from 129-2 to 99-2.

"The authors just mentioned have established, by their experiments, that the *plethoric condition*, and the symptoms incident to it, are probably the effect of an increase in the mass of the blood, and in nowise of any change in its composition. The average proportion of globules found by them in six cases of well-marked plethora, in males, was 138, or rather less than the normal average. MM. Andral and Gavarret found the average, in thirty-one plethoric persons, (sex not mentioned,) to be 141, or precisely the average for healthy blood obtained by Becquerel and Rodier. If, then, this latter number be admitted to be correct, it is clear that the blood undergoes no change of composition in plethora, and the symptoms of the disorder can only be referred to the excessive quantity contained in the vessels."

The following, in reference to the fluid of dropsies, is interesting, being, in part, new:

"The fluid of dropsical effusions is not the same in all cases. Sometimes it contains a large proportion of dissolved fibrin, which, coagulating, forms false membranes in cavities, and an interstitial deposit in parenchymatous organs; sometimes, on the other hand, the fluid is simply serous. The cases of the former kind are nearly all due to inflammation, and constitute the class of *fibrinous dropsies*. The effused fluid, as stated, generally coagulates within the body, but it sometimes preserves the liquid form until removed artificially, and then coagulates. This fluid is supposed to be extravasated chiefly by the capillary vessels, while that of *serous*

dropsy permeates the walls of the veins almost exclusively. These two forms have been only of late distinguished from one another.

The fluid of dropsy was formerly supposed to be identical with the serum of the blood, but the analyses of MM. Andral and Gavarret have shown the incorrectness of this opinion. In sixteen cases of serous dropsy examined by them, the highest proportion of albumen in the effused liquid was 48, and the lowest 4, the average proportion of serum in the healthy blood being 70. These observers did not find that the *seat* of the effusion made any sensible difference in the proportion of albumen. The state of the constitution, however, influenced it; the less the strength of the patient, the less the albumen, and *vice versa*. Thus in six cases of hydrocele, the subjects of which were all in robust health, the proportion of albumen varied between 35 and 59; and when, in dropsy of the larger cavities, tapping was performed several times, it was found that the quantity of albumen in the fluid evacuated progressively declined. The proportion of water in dropsical effusions was found to vary between 950 and 986, the normal average in the blood being 790. All of the cases of dropsy here alluded to were due to venous congestion from mechanical causes. Had they arisen from inflammation it is probable that the proportion of coagulable matter in the effused fluid would have been greater; since, as the authors alluded to remark, it is found to be so in the fluid obtained from the skin by vesication.

"The preceding statements furnish the positive proof of what has long been alleged, that the blood is impoverished in dropsy, and show that its impoverishment is due to a loss of albumen, and in some cases of fibrin. Confirmatory negative evidence of this proposition is to be found in the fact that a decline in the proportion of neither of the remaining chief constituents of the blood, fibrin or red globules, without that of albumen, ever produces a similar result, for dropsy does not exist either in chlorosis, or in fevers and affections of a typhoid type, except as an unusual complication."

Passing over the pathological anatomy of inflammation, lesions of nutrition, and morbid growths, we come to the closing paragraph on the subject of parasites:

"*Parasites.*—Certain independent organisms, both vegetable and animal, are found in the human body. The vegetable growths are all microscopic, and belong to the lowest orders of plants, the *algæ* and *fungi*. They are never met with ex-

cept upon cutaneous or mucous surfaces, nor while these surfaces remain healthy. Usually, a secretion of fibrin or mucus, undergoing decomposition, forms the soil in which they grow. In some cases, they are believed to be the media of contagion, as in that form of impetigo which affects the hair-bulbs of the scalp, and is called *favus*. This is the most important example of their connecion with disease.

"Animal parasites are very numerous. Many of them are infusorial; many belong to the class of insects and mites, as fleas, lice, bugs, and the acari, of which the most important one is the *itch-mite*. A class of higher consequence comprises several sorts of worms. Those which infest the intestinal canal are extremely common, and are the *oxyuris vermicularis*, or *thread-worm*, which inhabits the rectum; the *trichocephalus dispar*, or *long thread-worm*, which is found in the large intestine, and especially in the cœcum; *ascaris lumbricoides* or *round-worm*, whose ordinary residence is the small intestine; and the *tape-worm*, or *tænia*, which also affects the same part. The kidney is occasionally the seat of a round-worm, called the *strongylus gigas*, measuring from five inches to three feet in length, and from two to six lines in thickness. For a detailed account of these animals, of the *trichina*, the *echinococcus*, of *acephalocysts*, and numerous other parasites of still inferior interest, pathologically, the reader must consult special treatises.

"The diseases with which even large intestinal worms are connected, appear to be sometimes the cause and sometimes the effect of the presence of these parasites. Very often they exist in considerable numbers without producing the least disturbance of the economy, but in other cases they are unquestionably the cause of much suffering and ill health. How far they are themselves the result of a morbid state of the organs in which they appear, is still an undecided question.

"The origin of parasites is extremely obscure, and has long been a mooted point among naturalists. It may not be inappropriate to present a summary of the opinions which are entertained respecting a subject of so much interest, but in doing so, we shall confine our remarks to the parasitic animals which inhabit the interior of the body, or *entozoa*.

"It is evident that these animals must originate in one of two ways; that they must be derived directly or indirectly from without, or be created out of the materials existing within, and furnished by, the body. No other supposition is possible. If an entozoon is in any manner derived from without, it must be admitted that this takes place either through the reception of the animal itself, or of its ova. If

either opinion be assumed, it follows that the parent animal must exist somewhere external to the body. But the parasites in question have never, in any case whatever, been detected except within the organism. If it is objected that many of these animals are so minute that they might easily elude discovery in the elements around us, the argument fails when applied to the giant strongylus, the stout lumbricoid worm, and the tænia measuring many yards in length. Besides, even admitting for a moment the possibility of the parasites which inhabit the intestine, and other mucus cavities, having once existed externally, the insuperable difficulty still remains of explaining the entrance of entozoa into shut cavities and parenchymatous structures, into the eye, or the muscles, for example, and their presence in the unborn child, and even in the bodies of larger entozoa of a different species. On the other hand, if it is maintained that the ova are alone received, it must still be shown that the ova exist external to the body, which has never been done. Nor would the admission of this explanation be sufficient; for many of the entozoa are not propagated by eggs, but belong to the viviparous class, so that in regard to them the difficulty remains undiminished. But granting the existence of ova without, and their reception into the body, it is still impossible to explain the development from them of the animals found in the parenchymy, in the embryo, &c., without at the same time admitting that the ova are not only carried to these localities through the blood-vessels, but actually pass through the walls of the capillaries. Such an admission would be a physiological absurdity; for the extreme vessels will allow of the passage of a single blood-globule, at a time and no more, and will not permit any denser fluid than the plasma of the blood to permeate their walls, how then could they afford a passage in any manner to ova, the least of which is ten times as large as a blood-globule?

"If the hypothesis now presented is untenable, it only remains to adopt the alternative one, to-wit, that entozoa are generated or created anew out of the materials or the products of the living organism. It may be urged affirmatively, in support of this doctrine, that each organ possesses its own entozoa; the kidney, a species different from those of the intestine, which are, again, unlike the parasites of the liver. Even more, the several parts of the same organ generate dissimilar animals. The small intestine produces the round and the tape worms, the large intestine the two species of thread worms. These facts seem to show that some extremely local concurrence of circumstances is essential to the production of the several entozoa. It may also be argued,

and we think the argument unanswerable, that if spermatic animalcules, which exist in the testicle, are there spontaneously generated, no violence is done to probability in supposing parasitic animals to be produced in the same manner It will hardly be denied that spermatozoa are literally evolved from the constituents of the semen. But it is objected to the doctrine of spontaneous generation that it is against analogy, which everywhere supports the famous dogma, *omne vivum ex ovo.* This objection is a mere begging of the question. The decision of the case in hand involves the truth of the theory just quoted, and as we believe, must be allowed to show that this theory is not absolutely universal in its application. Other facts, also, amongst which are the following, tend to invalidate it. Nothing can be more certain than that all organized beings were, at some time or another, created; geology proves that successive genera and species have been thus created, at long intervals apart; and the history of disease renders it probable that one affection at least, syphilis, which is now propagated only by direct descent, *ex ovo*, as it were, is really of comparatively recent origin.

In conclusion, after a review of the preceding outline of an argument upon the generation of parasitic entozoa, we feel obliged to admit that the weight of facts and probabilities is wholly on the side of the doctrine of spontaneous generation; at the same time, we cannot but look with interest to the results of future observation in this field, nor altogether suppress the hope that the simple law of nature, *omne vivum ex ovo*, may even yet be found to embrace the classes which now appear to form so striking an exception to its provisions."

We have thus given some idea of the work and its different parts, but hope our readers will not be satisfied without the work itself, and, in fact, the whole library of which it is a volume. The publishers send direct by mail, when ordered, the works of the series, as fast as published. E.

Part 3.—Bibliographical Notices.

ARTICLE I.

Females and their Diseases, a series of Letters to his Class. By Chas. D. Meigs, M.D., Prof. of Midwifery and Diseases of Women and Children in the Jefferson Medical College at Philadelphia; Member of the American Medical Association, &c., &c. pp. 670. Phila.: Lea & Blanchard. 1848.

Here is a "new book," sure enough, as the author calls it; not that the teachings are all new, but new in manner, style, and the rapidity of its production.

Dr. Meigs has certainly attained one object which he set out to accomplish: we mean, to write in a familiar style.

Some may think he has "sacrificed the dignity" in this; but certatnly it is better to dispense with the stiff, prosey, formal rules of writing, to make a book readable, than to say many good things and have them printed for the coating of dust on the shelf.

Dr. Meigs may have introduced too much familiar sick-room conversation into his letters, and his style may be rather quaint for the best, but certainly, his great reputation, the change in the book from the usual manner of writing, and the intrinsic merits with which the work abounds, will give it a wide spread circulation, and a very general perusal.

Some points that are new in the body of the work we may take occasion hereafter to refer to, but have room now only to give the following as a specimen of the sick-room conversations. After an extensive interrogation, which we omit, the diologue goes on as follows:

"I mean that, as you are pregnant some five weeks, the womb is much larger than it was before you were married; and it is now turned over backwards;—in fact, it is topsy turvy. The pressure of the top of your womb against the lower part of the bowel and the back bone, gives you pain in that situation; while the bottom, or rather the point of the

womb, is pressed with force against the bladder of urine, vexing and paining it, and stopping the course of the water, which can only escape drop by drop, while your bladder becomes continually fuller and fuller. It is very full now."

"Why, what in the world is to be done?"

"You are to allow me to remedy the difficulty."

"How?"

"By replacing the womb in its natural position."

"But how can you do that?"

"With my hand."

"I can't think of such a thing."

"Very well, madam, I shall have to bid you a good afternoon, for I can't think of anything else. In fact, there's nothing else to be done for you."

"Why, I'd rather die."

"As you please, madam; you are the mistress; ce que femme veut, Dieu le veut; but I hope you will permit me to say it would be very silly of you to die, for want of the power to make water, when there's a physician at hand, can put you so easily in the way to do it easily."

And she resorted to the ladies' resort—tears. After she had comforted herself a little in this way, and had come to her calmer reason again—

"Will it hurt me, sir?"

"Oh no, not a bit."

"What am I to do, then, if I must?"

"You are to lie on your left side, in bed. Covered up head and ears, with the bed-clothes. You are to draw up your knees very high, and I will cure you in a moment."

I washed my hands; I always do that first. I dipped the index finger of the right hand in oil. With its point I felt the gravid bas-fond of the womb looking downwards and forwards in the pelvis, while the os tincæ was cocked up against the urethra above the arch. Look again at the wood-cut.

"Don't bear down now, child! don't resist the pressure of my hand! I shall not hurt you at all, not in the least!" and so by a gentle, steady, augmented pressure against the bas-fond, pressing it upwards and backwards, I followed the ascending fundus until it suddenly escaped above the promontory, upon which the os uteri looked downwards again, and the organ was reposited."

"Now, how do you feel?"

"Oh, greatly relieved."

"Set up, and try to make water. I shall retire from your chamber. Call me when you are done. Is there a wash stand in the next chamber?"

In a few minutes she called me back; thankfully telling me she had made a large quantity of water, and was quite well again.

"Is not this, bad as it is, better than dying?"

"Oh yes, sir, thank you!" &c., &c.

ARTICLE II.

Report of the Chicago Retreat for the Insane. By EDWARD MEAD, M.D., Superintendent. Chicago: R. L. Wilson, Printer. 1848. (From the Author.)

In August last this institution was opened by the reception of one patient, which was speedily followed by others, so that in the six months that elapsed prior to the issue of the report before us, fifteen patients had been admitted; five of these have been cured, one died of organic disease which existed before admission, and nine remained in the institution at the time of the issue of the report.

The practicability of carrying on, advantageously, institutions of this kind by individual enterprise, has by some been doubted, but the determination of Dr. Mead, we hope, will be attended with such success as to convince such of the error of the position they have assumed. Chicago is certainly a most favorable point for an undertaking of the kind, and we shall hope from time to time to hear of the prosperity of the Retreat. For the information of those that may wish to patronize the establishment, we extract the following, giving terms, &c.:

"The terms are $4 per week. For those who desire a separate attendant, and a suit of rooms fitted up in more costly style than the general arrangements, $10 per week. Payment for three months required in advance, and security for monthly payments in advance thereafter. No patient will be admitted for a shorter period than three months. If, however, a patient should recover in a shorter period, such sum as may be agreed upon will be refunded."

Part 4.—Selections.

ARTICLE I.

Code of Medical Ethics of the National Medical Association.

CHAPTER I.

OF THE DUTIES OF PHYSICIANS TO THEIR PATIENTS AND OF THE OBLIGATIONS OF PATIENTS TO THEIR PHYSICIANS.

ART. I.—*Duties of Physicians to their Patients.*

§ 1. A physician should not only be ever ready to obey the calls of the sick, but his mind ought also to be imbued with the greatness of his mission, and the responsibility he habitually incurs in its discharge. Those obligations are the more deep and enduring, because there is no tribunal other than his own conscience, to adjudge penalties for carelessness or neglect. Physicians should, therefore, minister to the sick with due impressions of the importance of their office; reflecting that the ease, the health, and the lives of those committed to their charge, depend on their skill, attention and fidelity. They should study, also, in their deportment, so to unite *tenderness* with *firmness*, and *condescension* with *authority*, as to inspire the minds of their patients with gratitude, respect, and confidence.

§ 2. Every case committed to the charge of a physician should be treated with attention, steadiness, and humanity. Reasonable indulgence should be granted to the mental imbecility and caprices of the sick. Secrecy and delicacy, when required by peculiar circumstances, should be strictly observed; and the familiar and confidential intercourse to which physicians are admitted in their professional visits, should be used with discretion, and with the most scrupulous regard to fidelity and honor. The obligation of secrecy extends beyond the period of professional services; none of the privacies of personal and domestic life, no infirmity of disposition, or flaw of character observed during professional attendance, should ever be divulged by him except when he is imperatively required to do so. The force and necessity of this obligation are indeed so great, that professional men have, under certain circumstances, been protected in their observance of secrecy, by courts of justice.

§ 3. Frequent visits to the sick are, in general, requisite, since they enable the physician to arrive at a more perfect knowledge of the disease, to meet promptly every change which may occur, and also tend to preserve the confidence of the patient. But unnecessary visits are to be avoided, as they give useless anxiety to the patient, tend to diminish the authority of the physician, and render him liable to be suspected of interested motives.

§ 4. A physician should not be forward to make gloomy prognostications, because they savor of empiricism, by magnifying the importance of his services in the treatment or cure of the disease. But he should not fail, on proper occasions, to give to the friends of the patient timely notice of danger, when it really occurs; and even to the patient himself, if absolutely necessary. This office, however, is so peculiarly alarming when executed by him, that it ought to be declined whenever it can be assigned to any other person of sufficient judgment and delicacy. For, the physician should be the minister of hope and comfort to the sick; that, by such cordials to the drooping spirit, he may smooth the bed of death, revive expiring life, and counteract the depressing influence of those maladies which often disturb the tranquillity of the most resigned, in their last moments. The life of a sick person can be shortened not only by the acts, but also by the words or the manner of a physician. It is, therefore, a sacred duty to guard himself carefully in this respect, and to avoid all things which have a tendency to discourage the patient and to depress his spirits.

§ 5. A physician ought not to abandon a patient because the case is deemed incurable; for his attendance may continue to be highly useful to the patient, and comforting to the relatives around him, even in the last period of a fatal malady, by alleviating pain and other symptoms, and by soothing mental anguish. To decline attendance, under such circumstances, would be sacrificing to fanciful delicacy and mistaken liberality, that moral duty, which is independent of, and far superior to, all pecuniary consideration.

§ 6. Consultations should be promoted in difficult or protracted cases, as they give rise to confidence, energy, and more enlarged views in practice.

§ 7. The opportunity which a physician not unfrequently enjoys, of promoting and strengthening the good resolutions of his patients, suffering under the consequences of vicious conduct, ought never to be neglected. His counsels, or even remonstrances, will give satisfaction, not offence, if they be proffered with politeness, and evince a genuine love of vir-

tue, accompanied by a sincere interest in the welfare of the person to whom they are addressed.

ART. II.—*Obligations of Patients to their Physicians.*

§ 1. The members of the medical profession, upon whom are enjoined the performance of so many important and arduous duties towards the community, and who are required to make so many sacrifices of comfort, ease, and health, for the welfare of those who avail themselves of their services, certainly have a right to expect and require, that their patients should entertain a just sense of the duties which they owe to their medical attendants.

§ 2. The first duty of a patient is, to select as his medical adviser, one who has received a regular professional education. In no trade or occupation, do mankind rely on the skill of an untaught artist; and in medicine, confessedly the most difficult and intricate of the sciences, the world ought not to suppose that knowledge is intuitive.

§ 3. Patients should prefer a physician, whose habits of life are regular, and who is not devoted to company, pleasure, or to any pursuit incompatible with his professional obligations. A patient should, also, confide the care of himself and family, as much as possible, to one physician; for a medical man who has become acquainted with the peculiarities of constitution, habits, and predispositions, of those he attends, is more likely to be successful in his treatment, than one who does not possess that knowledge.

A patient who has thus selected his physician, should always apply for advice in what may appear to him trivial cases, for the most fatal results often supervene on the slightest accidents. It is of still more importance that he should apply for assistance in the forming stage of violent diseases; it is to a neglect of this precept that medicine owes much of the uncertainty and imperfection with which it has been reproached.

§ 4. Patients should faithfully and unreservedly communicate to their physician the supposed cause of their disease. This is the more important, as many diseases of a mental origin stimulate those depending on external causes, and yet are only to be cured by ministering to the mind diseased. A patient should never be afraid of thus making his physician his friend and adviser; he should always bear in mind that a medical man is under the strongest obligations of secrecy. Even the female sex should never allow feelings of shame or delicacy to prevent their disclosing the seat, symptoms, and causes of complaints peculiar to them. However com-

mendable a modest reserve may be in the common occurrences of life, its strict observance in medicine is often attended with the most serious consequences, and a patient may sink under a painful and loathsome disease, which might have been readily prevented had timely intimation been given to the physician.

§ 5. A patient should never weary his physician with a tedious detail of events or matters not appertaining to his disease. Even as relates to his actual symptoms, he will convey much more real information by giving clear answers to interrogatories, than by the most minute account of his own framing. Neither should he obtrude the details of his business nor the history of his family concerns.

§ 6. The obedience of a patient to the prescriptions of his physician should be prompt and implicit. He should never permit his own crude opinions as to their fitness, to influence his attention to them. A failure in one particular may render an otherwise judicious treatment dangerous, and even fatal. This remark is equally applicable to diet, drink, and exercise. As patients become convalescent they are very apt to suppose that the rules prescribed for them may be disregarded, and the consequence, but too often, is a relapse. Patients should never allow themselves to be persuaded to take any medicine whatever, that may be recommended to them by the self-constituted doctors and doctresses, who are so frequently met with, and who pretend to possess infallible remedies for the cure of every disease. . However simple some of their prescriptions may appear to be, it often happens that they are productive of much mischief, and in all cases they are injurious, by contravening the plan of treatment adopted by the physician.

§ 7. A patient should, if possible, avoid even the *friendly visits of a physician* who is not attending him; and when he does receive them, he should never converse on the subject of his disease, as an observation may be made, without any intention of interference, which may destroy his confidence in the course he is pursuing, and induce him to neglect the directions prescribed to him. A patient should never send for a consulting physician without the express consent of his own medical attendant. It is of great importance that physicians should act in concert; for, although their modes of treatment may be attended with equal success when employed singly, yet conjointly they are very likely to be productive of disastrous results.

§ 8. When a patient wishes to dismiss his physician, justice and common courtesy require that he should declare his reasons for so doing.

§ 9. Patients should always, when practicable, send for their physician in the morning, before his usual hour of going out; for, by being early aware of the visits he has to pay during the day, the physician is able to apportion his time in such a manner as to prevent an interference of engagements. Patients should also avoid calling on their medical adviser unnecessarily during the hours devoted to meals or sleep. They should always be in readiness to receive the visits of their physician, as the detention of a few minutes is often of serious inconvenience to him.

§ 10. A patient should, after his recovery, entertain a just and enduring sense of the value of the services rendered him by his physician; for these are of such a character, that no mere pecuniary acknowledgment can repay or cancel them.

CHAPTER II.

OF THE DUTIES OF PHYSICIANS TO EACH OTHER, AND TO THE PROFESSION AT LARGE

ART. I.—*Duties for the support of professional character.*

§ 1. Every individual, on entering the profession, as he becomes thereby entitled to all its privileges and immunities, incurs an obligation to exert his best abilities to maintain its dignity and honor, to exalt its standing, and to extend the bounds of its usefulness. He should, therefore, observe strictly, such laws as are instituted for the government of its members; should avoid all contumelious and sarcastic remarks relative to the faculty, as a body; and while, by unwearied diligence, he resorts to every honorable means of enriching the science, he should entertain a due respect for his seniors, who have, by their labors, brought it to the elevated condition in which he finds it.

§ 2. There is no profession, from the members of which greater purity of character, and a higher standard of moral excellence are required, than the medical; and to attain such eminence, is a duty every physician owes alike to his profession and to his patients. It is due to the latter, as without it he cannot command their respect and confidence, and to both, because no scientific attainments can compensate for the want of correct moral principles. It is also incumbent upon the faculty to be temperate in all things, for the practice of physic requires the unremitting exercise of a clear and vigorous understanding; and, on emergencies for which

no professional man should be unprepared, a steady hand, an acute eye, and an unclouded head may be essential to the well-being, and even to the life, of a fellow creature.

§ 3. It is derogatory to the dignity of the profession, to resort to public advertisements or private cards or handbills, inviting the attention of individuals affected with particular diseases—publicly offering advice and medicine to the poor gratis, or promising radical cures; or to publish cases and operations in the daily prints or suffer such publications to be made—to invite laymen to be present at operations—to boast of cures and remedies—to adduce certificates of skill and success, or to perform any other similar acts. These are the ordinary practices of empirics, and are highly reprehensible in a regular physician.

§ 4. Equally derogatory to professional character is it, for a physician to hold a patent for any surgical instrument, or medicine; or to dispense a secret *nostrum*, whether it be the composition or exclusive property of himself, or of others. For, if such nostrum be of real efficacy, any concealment regarding it is inconsistent with beneficence and professional liberality; and, if mystery alone give it value and importance, such craft implies either disgraceful ignorance, or fraudulent avarice. It is also reprehensible for physicians to give certificates attesting the efficacy of patent or secret medicines, or in any way to promote the use of them.

ART. II.—*Professional services of physicians to each other.*

§ 1. All practitioners of medicine, their wives, and their children while under the paternal care, are entitled to the gratuitous services of any one or more of the faculty residing near them, whose assistance may be desired. A physician, afflicted with disease, is usually an incompetent judge of his own case; and the natural anxiety and solicitude which he experiences at the sickness of a wife, a child, or any one who, by the ties of consanguinity, is rendered peculiarly dear to him, tend to obscure his judgment, and to produce timidity and irresolution in his practice. Under such circumstances, medical men are peculiarly dependent upon each other, and kind offices and professional aid should always be cheerfully and gratuitously afforded. Visits ought not, however, to be obtruded officiously; as such unasked civility may give rise to embarrassment, or interfere with that choice, on which confidence depends. But, if a distant member of the faculty, whose circumstances are affluent, request attendance, and an honorarium be offered, it should not be declined; for no pe-

cuniary obligation ought to be imposed, which the party receiving it would wish not to incur.

ART. III.—*Of the duties of physicians as respects vicarious offices.*

§ 1. The affairs of life, the pursuit of health, and the various accidents and contingencies to which a medical man is peculiarly exposed, sometimes require him temporarily to withdraw from his duties to his patients, and to request some of his professional brethren to officiate for him. Compliance with this request is an act of courtesy, which should always be performed with the utmost consideration for the interest and character of the family physician, and when exercised for a short period, all the pecuniary obligations for such service should be awarded to him. But if a member of the profession neglect his business in quest of pleasure and amusement, he cannot be considered as entitled to the advantages of the frequent and long-continued exercise of this fraternal courtesy, without awarding to the physician who officiates the fees arising from the discharge of his professional duties.

In obstetrical and important surgical cases, which give rise to unusual fatigue, anxiety and responsibility, it is just that the fees accruing therefrom should be awarded to the physician who officiates.

ART. IV.—*Of the duties of physicians in regard to consultations.*

§ 1. A regular medical education furnishes the only presumptive evidence of professional abilities and acquirements, and ought to be the only acknowledged right of an individual to the exercise and honors of his profession. Nevertheless, as in consultations the good of the patient is the sole object in view, and this is often dependent on personal confidence, no intelligent regular practitioner, who has a license to practice from some medical board of known and acknowledged respectability, recognized by this association, and who is in good moral and professional standing in the place in which he resides, should be fastidiously excluded from fellowship, or his aid refused in consultation when it is requested by the patient. But no one can be considered as a regular practitioner, or a fit associate in consultation, whose practice is based on an exclusive dogma, to the rejection of the accumulated experience of the profession, and of the aids actu-

ally furnished by anatomy, physiology, pathology, and organic chemistry.

§. 2. In consultations, no rivalship or jealousy should be indulged; candor, probity, and all due respect should be exercised towards the physician having charge of the case.

§. 3. In consultations, the attending physician should be the first to propose the necessary questions to the sick; after which the consulting physician should have the opportunity to make such farther inquiries of the patient as may be necessary to satisfy him of the true character of the case. Both physicians should then retire to a private place for deliberation; and the one first in attendance should communicate the directions agreed upon to the patient or his friends, as well as any opinions which it may be thought proper to express. But no statement or discussion of it should take place before the patient or his friends, except in the presence of all the faculty attending, and by their common consent; and no *opinions* or *prognostications* should be delivered, which are not the result of previous deliberation and concurrence.

§ 4. In consultations, the physician in attendance should deliver his opinion first; and when there are several consulting, they should deliver their opinions in the order in which they have been called in. No decision, however, should restrain the attending physician from making such variations in the mode of treatment, as any subsequent unexpected change in the character of the case may demand. But such variation and the reasons for it ought to be carefully detailed at the next meeting in consultation. The same privilege belongs, also, to the consulting physician, if he is sent for in an emergency, when the regular attendant is out of the way, and similar explanations must be made by him, at the next consultation.

§ 5. The utmost punctuality should be observed in the visits of physicians when they are to hold consultation together, and this is generally practicable, for society has been considerate enough to allow the plea of a professional engagement to take precedence of all others, and to be an ample reason for the relinquishment of any present occupation. But as professional engagements may sometimes interfere, and delay one of the parties, the physician who first arrives should wait for his associate a reasonable period, after which the consultation should be considered as postponed to a new appointment. If it be the attending physician who is present, he will, of course, see the patient and prescribe; but if it be the consulting one, he should retire, except in case of emergency, or when he has been called from a considerable distance, in which latter case he may examine the patient,

and give his opinion in *writing* and *under seal*, to be delivered to his associate.

§ 6. In consultations, theoretical discussions should be avoided, as occasioning perplexity and loss of time. For there may be much diversity of opinion concerning speculative points, with perfect agreement in those modes of practice which are founded, not on hypothesis, but on experience and observation.

§ 7. All discussions, in consultation, should be held as secret and confidential. Neither by words nor manner should any of the parties to a consultation assert or insinuate, that any part of the treatment pursued did not receive his assent. The responsibility must be equally divided between the medical attendants—they must equally share the credit of success as well as the blame of failure.

§ 8. Should an irreconciliable diversity of opinion occur when several physicians are called upon to consult together, the opinion of the majority should be considered as decisive; but if the numbers be equal on each side, then the decision should rest with the attending physician. It may, moreover, sometimes happen, that two physicians cannot agree in their views of the nature of a case, and the treatment to be pursued. This is a circumstance much to be deplored, and should always be avoided, if possible, by mutual concessions, as far as they can be justified by a conscientious regard for the dictates of judgment. But, in the event of its occurrence, a third physician should, if practicable, be called to act as umpire, and if circumstances prevent the adoption of this course, it must be left to the patient to select the physician in whom he is most willing to confide. But as every physician relies upon the rectitude of his judgment, he should, when left in the minority, politely and consistently retire from any further deliberation in the consultation, or participation in the management of the case.

§ 9. As circumstances sometimes occur to render a *special consultation* desirable, when the continued attendance of two physicians might be objectionable to the patient, the member of the faculty whose assistance is required in such cases, should sedulously guard against all future unsolicited attendance. As such consultations require an extrordinary portion both of time and attention, at least a double honorarium may be reasonably expected.

§ 10. A physician who is called upon to consult, should observe the most honorable and scrupulous regard for the character and standing of the practitioner in attendance: the practice of the latter, if necessary, should be justified as far as it can be, consistently with a conscientious regard for

truth, and no hint or insinuation should be thrown out, which could impair the confidence reposed in him, or affect his reputation. The consulting physician should also carefully refrain from any of those extraordinary attentions or assiduities, which are too often practiced by the dishonest for the base purpose of gaining applause, or ingratiating themselves into the favor of families and individuals.

ART. V.—*Duties of Physicians in cases of interference.*

§ 1. Medicine is a liberal profession, and those admitted into its ranks should found their expectations of practice upon the extent of their qualifications, not on intrigue or artifice.

§ 2. A physician, in his intercourse with a patient under the care of another practitioner, should observe the strictest caution and reserve. No meddling inquiries should be made; no disingenuous hints given relative to the nature and treatment of his disorder; nor any course of conduct pursued that may directly or indirectly tend to diminish the trust reposed in the physician employed.

§ 3. The same circumspection and reserve should be observed, when, from motives of business or friendship, a physician is prompted to visit an individual who is under the direction of another practitioner. Indeed, such visits should be avoided, except under peculiar circumstances, and when they are made, no particular inquiries should be instituted relative to the nature of the disease, or the remedies employed, but the topics of conversation should be as foreign to the case as circumstances will admit.

§ 4. A physician ought not to take charge of, or prescribe for a patient who has recently been under the care of another member of the faculty in the same illness, except in cases of sudden emergency, or in consultation with the physician previously in attendance, or when the latter has relinquished the case or been regularly notified that his services are no longer desired. Under such circumstances, no unjust and illiberal insinuations should be thrown out in relation to the conduct or practice previously pursued, which should be justified as far as candor, and regard for truth and probity will permit; for it often happens, that patients become dissatisfied when they do not experience immediate relief, and, as many diseases are naturally protracted, the want of success, in the first stage of treatment, affords no evidence of a lack of professional knowledge and skill.

§ 5. When a physician is called to an urgent case, because the family attendant is not at hand, he ought, unless his as-

sistance in consultation be desired, to resign the care of the patient to the latter immediately on his arrival.

§ 6. It often happens, in cases of sudden illness, or of recent accidents and injuries, owing to the alarm and anxiety of friends, that a number of physicians are simultaneously sent for. Under these circumstances, courtesy should assign the patient to the first who arrives, who should select from those present, any additional assistance that he may deem necessary. In all such cases, however, the practitioner who officiates, should request the family physician, if there be one, to be called, and, unless his further attendance be requested, should resign the case to the latter on his arrival.

§ 7. When a physician is called to the patient of another practitioner, in consequence of the sickness or absence of the latter, he ought, on the return or recovery of the regular attendant, and with the consent of the patient, to surrender the case.

§ 8. A physician, when visiting a sick person in the country, may be desired to see a neighboring patient who is under the regular direction of another physician, in consequence of some sudden change or aggravation of symptoms. The conduct to be pursued on such an occasion is to give advice adapted to present circumstances; to interfere no farther than is absolutely necessary with the general plan of treatment; to assume no future direction, unless it be expressly desired; and, in this last case, to request an immediate consultation with the practitioner previously employed.

§ 9. A wealthy physician should not give advice *gratis* to the affluent; because his doing so is an injury to his professional brethren. The office of a physician can never be supported as an exclusively beneficent one; and it is defrauding, in some degree, the common funds for its support, when fees are dispensed with, which might justly be claimed.

§ 10. When a physician, who has been engaged to attend a case of midwifery, is absent, and another is sent for, if delivery is accomplished during the attendance of the latter, he is entitled to the fee, but should resign the patient to the practitioner first engaged.

Art. VI.—*Of differences between Physicians.*

§ 1. Diversity of opinion, and opposition of interest, may, in the medical, as in other professions, sometimes occasion controversy and even contention. Whenever such cases unfortunately occur, and cannot be immediately terminated, they should be referred to the arbitration of a sufficient number of physicians, or a *court-medical*.

As peculiar reserve must be maintained by physicians towards the public, in regard to professional matters, and as there exist numerous points in medical ethics and etiquette through which the feelings of medical men may be painfully assailed in their intercourse with each other, and which cannot be understood or appreciated by general society, neither the subject matter of such differences nor the adjudication of the arbitrators should be made public, as publicity in a case of this nature may be personally injurious to the individuals concerned, and can hardly fail to bring discredit on the faculty.

ART. VII.— *Of Pecuniary Acknowledgments.*

§ 1. Some general rules should be adopted by the faculty, in every town or district, relative to *pecuniary acknowledgments* from their patients; and it should be deemed a point of honor to adhere to these rules with as much uniformity as varying circumstances will admit.

CHAPTER III.

OF THE DUTIES OF THE PROFESSION TO THE PUBLIC, AND OF THE OBLIGATIONS OF THE PUBLIC TO THE PROFESSION.

ART. I.— *Duties of the Profession to the Public.*

§ 1. As good citizens, it is the duty of physicians to be ever vigilant for the welfare of the community, and to bear their part in sustaining its institutions and burdens: they should also be ever ready to give counsel to the public in relation to matters especially appertaining to their profession, as on subjects of medical police, public hygiene, and legal medicine. It is their province to enlighten the public in regard to quarantine regulations — the location, arrangement, and dietaries of hospitals, asylums, schools, prisons, and similar institutions — in relation to the medical police of towns, as drainage, ventilation, &c.—and in regard to measures for the prevention of epidemic and contagious diseases; and when pestilence prevails, it is their duty to face the danger, and to continue their labors for the alleviation of the suffering, even at the jeopardy of their own lives.

§ 2. Medical men should also be always ready, when called on by the legally constituted authorities, to enlighten coroners' inquests and courts of justice, on subjects strictly medical — such as involve questions relating to sanity, le-

gitimacy, murder by poisons or other violent means, and in regard to the various other subjects embraced in the science of Medical Jurisprudence. But in these cases, and especially where they are required to make a post-mortem examination, it is just, in consequence of the time, labor, and skill required, and the responsibility and risk they incur, that the public should award them a proper honorarium.

§ 3. There is no profession, by the members of which eleemosynary services are more liberally dispensed, than the medical, but justice requires that some limits should be placed to the performance of such good offices. Poverty, professional brotherhood, and certain public duties referred to in section 1 of this chapter, should always be recognized as presenting valid claims for gratuitous services; but neither institutions endowed by the public or by rich individuals, societies for mutual benefit, for the insurance of lives or for analagous purposes, nor any profession or occupation, can be admitted to possess such privilege. Nor can it be justly expected of physicians to furnish certificates of inability to serve on juries, to perform militia duty, or to testify to the state of health of persons wishing to insure their lives, obtain pensions, or the like, without a pecuniary acknowledgment. But to individuals in indigent circumstances, such professional services should always be cheerfully and freely accorded.

§ 4. It is the duty of physicians, who are frequent witnesses of the enormities committed by quackery, and the injury to health and even destruction of life caused by the use of quack medicines, to enlighten the public on these subjects, to expose the injuries sustained by the unwary from the devices and pretensions of artful empirics and impostors. Physicians ought to use all the influence which they may possess, as professors in Colleges of Pharmacy, and by exercising their option in regard to the shops to which their prescriptions shall be sent, to discourage druggists and apothecaries from vending quack or secret medicines, or from being in any way engaged in their manufacture and sale.

ART. II. — *Obligations of the Public to Physicians.*

§ 1. The benefits accruing to the public directly and indirectly from the active and unwearied beneficence of the profession, are so numerous and important, that physicians are justly entitled to the utmost consideration and respect from the community. The public ought likewise to entertain a just appreciation of medical qualifications; to make a proper discrimination between true science and the assumptions of

ignorance and empiricism—to afford every encouragement and facility for the acquisition of medical education,—and no longer to allow the statute books to exhibit the anomaly of exacting knowledge from physicians, under liability to heavy penalties, and of making them obnoxious to punishment for resorting to the only means of obtaining it.

ARTICLE II.

Letter from Professor J. A. EVE *to the Editor, [of the Southern Medical and Surgical Journal,] on the use of Chloroform in Obstetric Practice.*

MARCH 15th, 1845.

DEAR DOCTOR—Before taking leave of our last class, I expressed to them my thorough conviction of the safety and utility of the Chloroform in Obstetric Practice; and these have certainly been satisfactorily demonstrated by Profesor Simpson, to whom the gratitude of the gentler sex and the medical profession is due for having introduced it into obstetrics. And its safety and utility determine the propriety; for it is absurd to object to its use as an attempt to countervail the Divine decree which said to our first mother "in sorrow thou shalt bring forth." The argument would be equally good against all obstetric assistance, and indeed of equal force against any profession or calling in life, by which any descendant of Adam may "eat bread," otherwise than "in the sweat of his brow." It is certainly much more consonant with sound reason and true religion, to regard all the discoveries and improvements in Science and Art as the blessings of God, given to soften the severity of the primeval curse, and meliorate man's fallen state, without respect to person or sex.

But whilst the safety of chloroform, in properly selected cases, has been demonstrated, it is unreasonable to suppose that an agent, so powerful in its action on the nervous system as entirely to suspend sensibility, can be altogether devoid of danger, in some cases, and no caution requisite in its administration.

My opinion is, that it should only be administered in labors of unusual severity, or wherein some capital obstetric

operation is required, and never, unless the system is free from disease, especially from those of the head, or even a predisposition thereto. That it should rarely, if ever, be given before the termination of the first stage; that the patient should not be kept under its influence more than one or two continuous hours, but be allowed to wake up, and after a short interval be put to sleep again, as often as may be considered necessary.

On the 4th instant, I administered the chloroform to a lady whose former labors had been very painful and protracted: at a quarter past 10 o'clock, P. M., soon after the second stage had commenced she began to inhale it simply poured on a handkerchief, as a piece of sponge could not be procured. She soon fell asleep, but the uterine contractions continued with equal force and more effect. My first remark was, that the contractions were more efficient in advancing the labor, though further apart, but on timing the intervals by a watch, it was found that they were only apparently long, from the intense anxiety with which I waited for the uterus to act, and that sometimes the interval was not more than two or three minutes. Her pulse became slower. Her respiration was sometimes audible, but never stertorous; during most of the time she slept and breathed as sweetly and softly as an infant. She would occasionally wake up partially, and eagerly grasp and press the handkerchief to her nose to deepen the effect. She continued under the influence of the chloroform an hour and a quarter, unconscious of pain until after the expulsion of the head, when she awoke and earnestly entreated for more, but the supply was exhausted. She declared that if she had had more, the whole birth would have been accomplished without her knowledge; but even as it was, she said she did not suffer near as much, as she otherwise would have done, from the last pain or two required to terminate the delivery, in consequence of having had so long a respite from pain.

I confidently believe, had she not taken the chloroform, her labor would have continued some hours longer, as on former occasions, when her children were much smaller than in this instance; the child weighed eleven pounds.

The agency of chloroform in accelerating labour is most probably attributable, in a great degree, if not principally, to its effect in rendering the patient silent and motionless, when no power being expended in exclamation and motion, all the energies of the system are concentrated on the uterus.

This lady compared the sensation excited in her head, by chloroform, to the sound of ten thousand hammers, but it was not at all painful or even unpleasant. She expressed herself

in the highest degree delighted with its effects, and thanked Heaven that she had had resolution enough to take it—that hereafter she would not be afraid to use it for any purpose.

Not the slightest injury was sustained, either by mother or offspring.

Since the above was written, there has been published in the Medical Examiner a letter from Professor Meigs to Professor Simpson, in which the former gentleman objects to chloroform, in obstetric practice—1st, because he regards the pain in parturition as physiological, and thinks it ought not to be suppressed, and 2dly, because in the employment of instruments, he considers it necessary to know how much the patient suffers to avoid doing harm.

The first objection appears to me rather more specious than solid, for admitting the pain to be physiological, I can perceive no good reason why it should not be relieved, if susceptible of relief, without interference with the process or injury to the patient. But it is a difficult question to determine how much pain is strictly physiological, or essential to parturition, and how much is the result of the unnatural and injurious habits and customs of civilized life; for we know that in the savage state and among those whose manner of living is more natural and conducive to the healthy performance of all the physical functions, there is comparatively very little pain or danger; and even in the most refined society, instances are not very uncommon of almost painless labour.

In what are styled easy labors, or whenever the suffering is not intense, anæsthesia is scarcely necessary, even if there were no danger at all. But pain, when inordinate, is itself a great source of danger, as it may destroy life directly, or indirectly, by inducing convulsions or other fatal affections: it should certainly, therefore, be at least abated, whether physiological or pathological. If there were no dangers to be apprehended from pain, it is in itself a great evil, and its relief an object of vast importance, one of the happiest achievements and highest triumphs of medicine. Surgical statistics declare a diminished mortality, under the use of anæsthetic agents, and I think it highly probable there will hereafter be the same result in obstetrics.

Professor Meigs' second objection does not appear to me much more valid than the first. The degree of pain actually felt is not always in proportion to the injury sustained, and the expression is a still more fallible criterion. Some complain excessively when suffering comparatively very little, whilst others make very little complaint, however intense their sufferings may be. Nothing can compensate to the ac-

coucheur for a want of the most minute and accurate knowledge of the maternal structures and the position and relations to them of the fœtal head. He should always operate by art and not by force, graduating the power employed by his knowledge of what may be applied and borne with safety, and not by the resistance to be overcome: he should always know that he is using no destructive violence, inflicting no injury, whether the patient be sensible of it or not. It would certainly be a very uncertain and unsafe reliance, to depend on the patient to inform us whether we are applying and using instruments properly. One great source of embarrassment and danger in operative midwifery is the difficulty often encountered, of controling the voluntary movements of the patient, which is entirely obviated by the anæsthetic influence of the chloroform. It is in instrumental deliveries, and during the performance of other important obstetric operations, that I consider its administration peculiarly appropriate and advantageous.

With sincere regard, your friend,

J. A. EVE.

—*Southern Med. and Sug. Journal.*

ARTICLE III.

On Euonymus Atropurpureus et Americanus. By CHARLES A. SANTOS, Norfolk, Virginia. (*An Inaugural Essay.*)

Nat. Ord. CELASTRACIÆ.

Sex. Syst. *Pentandria Monogynia.*

EUONYMUS. Sepals 4–5 (rarely 6), united at the base, forming a short flat calyx. Petals 4–5 (rarely 6). Stamens inserted on the upper surface of the broad and flat disk: filaments short, the base persistent: anthers with a thick connectivum at the back, opening transversely or longitudinally. Ovary immersed in the disk, with as many 2–3 ovuled cells as petals: styles united, short and thick: stigmas united into one, obtuse or lobed. Capsule 4–5-lobed, 4–5-celled, loculicidal. Seeds usually enclosed in a fleshy red or purple aril. Embryo with broad foliaceous cotyledons: albumen fleshy and oily. Shrubs, sometimes trailing or climbing by rootlets. Leaves opposite, serrate. Stipules mostly none.

Peduncles axillary, 1, many-flowered: inflorescence cymose. —*Torrey & Gray, Flora N. Amer.*

Euonymus Atropurpureus, (Jacq). branches smooth:—leaves (rather large) oval or elliptical, oblong, acuminate, mostly acute at the base, finely serrate, on distinct petioles, perverulent beneath; peduncles compressed, several-flowered: parts of the flower usually in fours: petals rounding, obovate: capsules smooth, deeply lobed.—*Jacq.*

Flowers June, July. Shrub 4–12 feet high; the branches slightly 4-sided. Leaves 2 to 5 inches long. Petals dark purple. Capsule crimson when mature. Seeds nearly white, invested with a bright red succulent aril.—*Torrey & Gray, Flor. N. Amer.*

Common Names. Burning-bush, Spindle-tree.

Euonymus Americanus, (Linn.); Branches smooth, 4-sided; leaves varying from elliptical-lanceolate to oval obovate; on very short petioles rather obscurely serrate, glabrous, peduncles 1–3 flowered: petals roundish-obovate: capsules depressed globose, verrucate-echinate.—*Willd.*

Flowers, May to June. Branches slender, green. Leaves 1–2 inches long, coriaceous, nearly evergreen in the Southern States. Parts of the flower mostly in threes or fives. Segments of the calyx very short and roundish. Petals greenish-yellow, tinged was purple. Capsura deep crimson when mature, slightly angled, densely muricate or warty; the dissepiments and aril scarlet. Seeds smaller than in the preceding, 1–3 in each cell. Both species are very oramental in autumn when the fruit is ripe.—*Torrey & Gray, Flor. N. Amer.*

Common Names. Strawberry-tree, Burning-bush.

The Wahoo Bark, the subject of the present paper, is derived from the preceeding varieties of Euonymus. These shrubs are found throughout the United States and Canada, preferring rich soil and shady situations. In addition to the above name, which was conferred on these plants by the Indians, they have also received the title of the Indian Arrow Wood, from the straightness of their trunks. From Dr. S. W. Ripley, of Ohio, information concerning this bark, and the shrub affording it has been received; and in the locality in which he found it, it usually occurred in low grounds in the vicinity of creeks, and never attained a height of more than twelve feet. I have, however, been informed that in Kentucky its height sometimes exceeds twenty feet.

It has been stated that the bark derived from the root is more highly charged with medicinal properties, except when the plant is in full vegetation, when that from the twigs is more efficient.

The bark of the trunk and branches has alone been examined by the writer. This is in pieces from four to ten inches in length, a half to two lines in thickness, partly or perfectly quilled, and covered with an ash-colored epidermis, which is corrugated in some instances, sometimes quite smooth, and in other specimens having a verrucose structure. Internally it is usually white, but not unfrequently has a yellow hue.

The fracture is splintery, and on account of its ligneous fibous nature, it does not readily yield to the action of the pestle.

Chemical Examination.—Various experiments were pursued with this bark with a view of isolating any active principle present therein, and the following one only accompanied with satisfactory indications. A strong decoction was prepared, the gum, coloring principle, &c., precipitated by subacetate of lead, and the excess of lead removed by hydrosulphuric acid. The clear liquor possessed the bitter taste of the bark. It had an acid reaction, which, it is presumed, arose from acetic acid resulting from the decomposition of the acetate of lead. A solution of tannic acid produced a precipitate. Placed in a capsule on a sand bath, and evaporated, a brownish adhesive substance, soluble in ether, alcohol, and water, remained. The taste of the latter is bitter at first, afterwards acrid and persistent.

Other experiments induce the impression that future researches may produce successful results.

With iodine the decoction of the bark afforded no evidence of starch.

Subacetate of lead caused a copious deposite, thus evidencing gum.

The infusion of galls produced an abundant precipitate. The infusion behaved in like manner with the several reagents, and with nitrate of silver and bichloride of mercury, the presence of vegetable albumen was shown.

The tincture, prepared with alcohol 35° Baume, was of a beautiful yellow color. The addition of water rendered it turbid. No change was produced by it on litmus paper, or on the same reddened. Exposed to heat, a reddish resin and greenish fixed oil remained. One ounce of the bark was exhausted by displacement with eight fluid ounces of diluted alcohol. A clear tincture of a reddish color was afforded, which possessed in a great degree the bitterness of the bark. Five fluid ounces yielded, on evaporation, twelve grains of a brownish-red resinous extract, apparently rich in the properties of this article.

The etherial tincture, which was of a greenish yellow color, on being exposed to heat, afforded the oil and resin ob-

tained by the alcoholic treatment. On an adult, two grains of the latter produced a cathartic effect.

A portion of the bark was subjected to distillation, and the product found impregnated with its peculiar odor. On the surface greasy spots were observed; the sides of the receiver somewhat oily, and moreover the liquid slightly milky.

From these and other indications, there is but little doubt that a volatile oil exists in small amount. The ashes were examined, and potash, lime, and iron, recognized by their appropriate tests.

The important medical properties of a diuretic, tonic, antiperiodic, and hydragogue cathartic, have been ascribed to this bark, but its beneficial effect in the different forms of dropsy, have given it celebrity and procured its introduction as a medicine. It is usually employed in the forms of decoction and infusion. As a diuretic, these preparations are generally made in the proportion of an ounce to a pint of water, and administered in doses of a wineglass full. For exhibition as a tonic, two drachms to the same quanty of water, and given in like doses.

In closing, it may be remarked, that on account of the importance of this indigenous medicinal agent, it merits and will receive further examination. By some western practitioners it is much used, and regarded as an efficient medicine. If such be indeed the case, it is hoped that its employment will be more general, and that ere long it will be added to the list of efficient remedies.

ARTICLE IV.

Some Remarks on Scurvy. By R. S. Holmes, M.D., of St. Louis, late of the United States Army.

My attention was particularly called to this disease, by many well-marked, yet rather anomalous cases of it, that I witnessed with the army in Florida. I have seen it elsewhere since then, throughout the United States, and in Mexico, and I am convinced it is often overlooked or not suspected; that the names of other diseases had been given to it, and that from its diversified character, it defies all attempts at a complete history of its symptoms. The only well-marked proof that many diseases I have seen, have been affected by the

scorbutic constitution of the fluids, has been in the *cure;* if an inflamed eye, or an ulcerated leg, is cured by a drink of acids and a diet of vegetables, when the patient, for some time previously, has been living on salt provisions and without vegetables, it affords presumptive proof that the disease is of a scorbutic origin.

Scurvy stamps its impress on diseases very much in the manner that malaria is in the habit of doing. There is no disease that is not capable of taking on a scorbutic character — as far as I have had an apportunity of judging — even although the accredited symptoms of scurvy itself may not be present: nay, I believe there is scarcely an individual among the many who escape when exposed to scorbutic causes, who has not within him the *leaven* of the disease, capable of giving signs of presence, if not by absolute symptoms, still by the stamp of the scorbutic diathesis on any other disease to which the system may be liable.

It is a great error to suppose that in all cases of scurvy the gums are affected, or that the patient is depressed in spirits, or that he has a peculiarly sallow look, or that he loses his strength, or has livid colored patches, as if of extravasated blood beneath the skin; these may all be present, or not one of them, and yet the patient will have scurvy. How then, it may be asked, do you recognize the disease? We answer, by the certain causes that are known to produce it, and by the readiness with which acids or vegetables act favorably. We have certainly seen no single symptom present in all cases of scurvy; probably the most common signs of the disease are the patches, as if of purpura, which are seen beneath the skin, of an unhealthy liver colored appearance; these most generally occur on the arms, then on the legs and chest, or ankles, or some part of the face, but scarcely ever on any other part of the body. There is generally a puffness of the gums, or they become tender and bleed, or the teeth become loose; but a very universal sign of the disease in Florida, was the superficial extended ulcerations, or sheets of bullæ, giving rise afterwards to suppuration, which appeared on the feet and ankles and between the toes. This inflammation is very peculiar and characteristic: I think I have seen it in one half, of probably one hundred cases of scurvy, that I have treated; it originates by a crop of small vesicles, similar to those raised by a cantharides blister, sometimes remaining distinct, and often running into each other; these burst, and leave underneath a raw, partially suppurating surface, of probably the size of a dollar, scattered here and there over the foot or ankle, or between the toes. The first cases I saw of this kind, were in the

hospital at Tampa Bay. With a command of four hundred men, I had generally from thirty to fifty on the sick report. I had probably treated a dozen of these cases of inflammation, before I suspected the cause of disease—with what success may be imagined when the diagnosis was incorrect. I have had patients for three months on the sick report, with this inflammation, when the cure was probably brought about at the end of that time, by the anti-scorbutic diet that was habitually used in the hospital, as far, at least, as circumstances would permit: yet afterwards I was in the habit of curing these inflammations in a few days' time, by drinks of lemonade, or, what is better, I think, by a mixture of vinegar and the nitrate of potash, in as large doses as the stomach will bear; and by a diet of potatoes, and, if you wish, salt beef or pork, also; for it is not the *presence* of these articles, but the *absence* of acid vegetables that produces scurvy; sourkrout, too, the "unfermented cabbage of the Dutch," is a good article of diet, and can be had and preserved where potatoes cannot—but it is difficult for the stomach to digest it well, and is not equal to potatoes as an anti-scorbutic diet.

Another one of the most common forms in which scurvy betrayed itself, is in inflammation of the conjunctiva, or lids of the eye. I am not certain that this disease was of a scorbutic origin, but certainly no sooner would such an inflammation set in than it was seized upon and overshadowed by the scorbutic diathesis; and I am much inclined to believe, that this inflammation was caused by the seeds of scurvy in the system. Ulceration of the cornea was also another very common form of disease of the eye, in which this diathesis played the chief part. In examining a recruit last winter, at Fort Snelling, near the falls of St. Anthony, a very stout man, well formed, and apparently in good health, I was struck with the appearance of three ulcers on the cornea of one eye; the other was not strong, but very little inflamed. This has generally been with me a cause of rejection—for the disease betokens constitutional or organic fault somewhere—but I concluded to pass this man, as he was otherwise stout and able-bodied, and it was not necessary that he should do duty immediately. I took him into the hospital and treated him by all the known modes I could think of, for the cure of ulceration of the cornea; first by touching the ulcers with nitrate of silver, by antiphlogistics, with absence of light and confinement to the house—then by stimulants and exercise out of doors; but all was of no avail; at the end of two months the eye was as much diseased as when he first entered the hospital. I enquired into his former habits of life, and found he had been a sailor, but had been for

some months working in the lead mines of Wisconsin, and almost wholly deprived of vegetable diet. I suspected the cause—put the patient upon a strict anti-scorbutic diet, and by occasionally touching the ulcers with nitrate of silver, healed them in two weeks' time. This case brought to my recollection another peculiar feature of scurvy that I had often seen verified in Florida; that is, the facility with which relapse take place. This man troubled me twice again during the winter and spring with the same disease, which I cured in the same manner; for the supply of potatoes for the men at the Fort was small, and they were of a bad quality, the acid of the potatoe being probably destroyed by the severe cold and age. I may incidentally mention, for the benefit of those who examine recruits, that this was one of three or four cases that I have passed where the cornea was ulcerated and in this, as in every other case, I have had cause to regret it. I think it ought always to be placed among the disqualifying circumstances.

Soldiers subject to the phlegmasiæ, and also to a scorbutic diathesis, were among our most frequent patients in Florida; the relapses were so frequent, that such men were scarcely ever out of the hospital. By the aid of a proper diet, we could easily accomplish a cure for the time being, but the disease would return in a week or ten days after the diet peculiar to troops when in that State, was used; ulcers on the legs, burrowing inflammations after wounds, the occurrence of a very foul and unhealthy state of the gums after the extraction of a tooth, and a peculiar susceptibility to salivation from the use of mercury, or other medicinal agents, were among the most common effects of the scorbutic constitution; added to these were those signs recognized most generally as indicative of scurvy—tender gums, liver colored blotches, sallow countenance, depressed spirits, (probably of all the most common symptoms,) secretions altered, bowels deranged, and muscular system weakened.

I wish to call the attention of some of your readers to this disease, for I am convinced it is a much more common one in the country than is generally supposed. It is a great error to believe that, because one lives out of a town, that fresh vegetables can be procured; the country, as far as my experience goes, is often the most difficult place to get them. Potatoes could never be had at most of our frontier posts, were they not cultivated by the soldiers themselves, and preserved during the winter; and it is quite a source of profit to the soldiers to sell their extra supply to the country people around, for their own consumption; they are the great prophylactics in scurvy, and generally the only vegetables used during nine months of the year, in the northern part of the

United States. But the supply in new settlements is often very limited, while in the lumber regions of Maine, New York, on the head waters of the Mississippi, and in the mining districts of Illinois, Wisconsin, and Iowa, the workmen are deprived of any vegetables whatever for many months of the year; their diet consists of pork, beans, hard bread, and coffee. No conception can be formed, by any one who has not been much in the untrodden ways of the country, of the extent to which salt pork, as an article of diet, is used; not that *it* produces scurvy, but the facts are, that where it is much used, vegetables are not, for the simple reason that they cannot be procured. Moisture, one of the greatest exciters of the disease, is wanting, in a great measure, in the interior of the country, and this is one cause of the disease being circumscribed. I have observed that it is more prevalent along the sea coast, and this is, probably, one of the chief reasons of its frequent occurrence on the ocean.—*St. Louis Med. and Surg. Jour.*

ARTICLE IV.

Influence of Statistics on Quackery.

Dr. Cartwright, of Natchez, Miss., delivered an excellent lecture recently in St. Louis, which has been published in the Missouri Medical and Surgical Journal, from which we make the following extract, showing most clearly the influence of empiricism on the public mortality. If such facts as these were carefully collected wherever opportunities offer, and given to the public, the influence could scarcely be different from that on the community of Natchez:

Permit me, gentlemen, now to make some remarks on the results afforded by Statistical Medicine, in the different eras above mentioned. In the first era, extending from 1823 to 1834—ten years—empiricism was excluded from Mississippi by the strong hand of legislative power. During that period, the annual average mortality of the whole population in the city of Natchez, including strangers, boatmen, and great numbers of negroes brought there for sale, was only one in thirty, and not more than one in sixty of the citizens

proper. Yet these ten years constituted a period rife with epidemic diseases. During this period, besides the diseases incident to the climate, the physicians had to contend with the small-pox, measles, whooping-cough, scarlet-fever, and Asiatic cholera, all in the epidemic form, and besides, with two epidemic yellow-fevers. But they had no quackery to contend with. They had the confidence of the people. The venders, proprietors, and pedlars, in patent medicines and nostrums, had not destroyed that confidence, as they have since done, to open a market for the sale of their empirical preparations. The citizens of Natchez, leaning on the arm of science, under circumstances calculated to desolate and depopulate any place less fortunately supplied with skilful physicians, passed through a period of ten years, and actually lost a fewer number per annum, in proportion to population, than almost any other town or city from which we have any authentic records—the mortality among the citizens proper, not exceeding one in sixty, while the whole mortality, including strangers, was only one in thirty. The sum total of all the deaths per annum, occurring both among the resident and non-resident population, during the whole period of ten years indicates a far less annual average mortality than either Edinburgh, Dublin, Madrid, Amsterdam, Naples, Rome, Vienna, or France itself can boast of. This result may be accounted for, from the fact, that the citizens generally of Natchez, sought medical aid very early in their disease, and all had the benefit of regular medical advice; whereas in France, and the cities just mentioned, only a small portion of the population, comparatively, have the advantages of regular medical attendance, and the necessary accompaniaments of a well regulated sick room from the commencement of their disease.

Let us now come to the second era, when the laws forbidding the empirical practice of medicine in Mississippi had been annulled under the new constitution, viz.: early in the year 1834. No less than six empirics, under the name of reformers, soon afterwards, located themselves in Natchez. They endeavored to convince the people that the regular physicians were unworthy of their confidence; that the old fashioned ignorance of the regular physicians, (or mineral medicine doctors as they called them,) ignorance disguised by technical terms in Latin and Greek, caused much unnecessary mortality, and greatly increased the amount of human suffering; whereas, they (the reformers) had a new system of treating all diseases, much safer, better, and *cheaper*, than the old method. They entered on the work of reformation, and the sexton's book proves, that no sooner did

they enter on their work, than the mortality suddenly increased from one in thirty to one in twenty-one per annum, almost equal to the mortality among the free negroes in Philadelphia. In a time remarkable for its health, without any epidemic disease to contend with, and omitting entirely every death which occurred in the epidemic yellow-fever of 1837, Natchez, during a period of four years and six months, (omitting the three months of the epidemic,) lost sixty-two individuals over and above the sum total of all the deaths in the ten years preceeding the advent of the reformers. It is true, the popluation in the second period was somewhat greater than that of the first period, but by no means great enough to account for the increase of mortality. The exact population being known, and the number of deaths being also known, the evils of empiricism can be demonstrated with certainty, as likewise the beneficial influences of science in medicine. Thus, in 1830, the exact population was known from a census carefully taken that year. The mortality of that year, when the people were protected from empiricism, was only one in thirty-four. The annual ratio of mortality in 1837, when the population was known, from an accurate census of the inhabitants taken that year, was one in twenty-four, for the nine healthy months, omitting entirely the three months of the epidemic. During the whole period of the reign of empiricism, from 1834 to near the termination of 1839, the annual average mortality, making more than due allowance for the increase of population, was about one in twenty-one per annum; whereas, before the introduction of quackery it was only one in thirty for ten years in succession. Lest it might be supposed that the comparatively small mortality of the ten years of the first period, when empiricism was excluded, might be owing to a greater proportional number of citizens leaving town in the summer, and likewise to a smaller number of unacclimated persons, it will be found on examination, that the mortality in January, February, March, April, and May, for five years in succession, has been nearly twice as great, under empiricism (making every allowance for increase of population) as it had been in the corresponding months for ten years under the regular practice. I do not attribute the whole of the increased mortality of the second period to the direct agency of the empirics themselves. The greater part of it was doubtlessly owing to their indirect agency in making war against some of the best known and well tried remedies of the Materia Medica, and to the artful measures they took, in conjunction with the proprietors and venders of nostrums, to impair the confidence of the public in the regular medical profession. Distrust

and want of confidence in physicians will always increase the mortality among any people, by preventing timely application for assistance. Statistical Medicine, as gathered from the sexton's books of Natchez, proves that a large number of the deaths occurring during the reign of empiricism, were not reported by any practitioner whatever. The people being told that there were two systems in medicine, an old system full of errors and dangers, and a new or reformed system, neglected, in many cases, to avail themselves of either, being doubtful which to choose.

About the close of 1839, after nearly five years had elapsed under the reign of quackery, called a reformation in medicine, I commenced a numerical analysis to test the results of the empirical practice. When completed, I called the physicians together and showed them the result. The numerical method declared that the mortality had nearly doubled under the pretended reformation in medicine; that is, it was nearly twice as great since the empirics came to town and opened their shops, as it had been during any portion of the preceeding time when medicine was protected. I called for a committee to examine my data, to compare them with the sexton's book and the different censes of the population, and to see if any error had been made, either in the statement of facts or the deductions therefrom, and to confer with the city council and the health officer, as also with the other officers of the city in regard to the actual number of the population. The committee reported that the facts were true, and the deductions founded thereon were mathematically correct; that it was strictly true that the mortality, from the very first appearance of the reformers in Natchez, had nearly doubled the mortality previously—in a healthy time with no epidemics to contend with; that the deaths occurring in the only epidemic which occurred during the reformation, had not been taken in the calculations at all, while all the deaths occurring in two epidemic yellow-fevers, two epidemic choleras, and one epidemic scarlet-fever, measles, whooping-cough, and small-pox, which afflicted Natchez previously to the advent of the reformers, had been included in the mortality of that period when medicine was solely in the hands of the regular physicians. Yet the mortality of this period, so rife with epidemics, was scarcely half as great as the mortality of that period when quackery was the only epidemic which prevailed. The prevalence of quackery, therefore, had been more fatal to the citizens of Natchez, nearly two to one, than the prevalence of the yellow-fever, cholera, measles, whooping-cough, and small-pox, and all other diseases put together. These

facts were embodied in a discourse before the Natchez Medical Society, and Dr. Yandell procured a copy from me, and published it in the Louisville Medical Journal. No other journal took notice of it, and no other publication was made of it, physicians being averse to using the public press. Nevertheless the citizens of Natchez found out that the result of introducing quackery had done no other good than nearly to double the mortality, and had made Natchez in a healthy time more fatal to human life than it ever had been before the introduction of empiricism in the most sickly times. They therefore petitioned the legislature to exclude it. As soon as the empirics found that the truth was against them, and that instead of their practice curing everything, it had been about twice as fatal as the old practice, and that the citizens had begun to find it out, they began, one by one, to exclude themselves — that is, to back out, and to leave the field to the physicians again. Their practice rapidly declined, and that of the physicians increased by the end of the year 1839. From that time the third era commenced, when quackery began to die a natural death under the light of statistical medicine, and soon became almost totally extinguished. As quackery declined, the mortality diminished, and Natchez became once more a healthy city, as the sexton's books will prove. In the summer of 1847, however, after the old fashioned, undisguised quackery had died out, one of the old physicians, who had gained a high reputation from a liberal and early use of quinine in malarial diseases, introduced empiricism again in Natchez, dressed in the disguise of science, under the new appellation of Homœopathy. From the summer, therefore, of 1847, the fourth era begins. Sufficient time has not yet elapsed to test the results of the practice by the unerring results of Statistical Medicine.

Part 5.—Editorial.

ARTICLE I.

McCLELLAN'S SURGERY.

The Theory and Practice of Surgery. By the late GEORGE McCLELLAN, M.D. In one volume, 8vo. Edited by his son, J. H. B. McCLELLAN, M.D. 1848. Grigg, Elliott, & Co., Phila.

WE have received, from the publishers, just as this No. is going to press, an invoice of the above work, which has not yet arrived, but we deem it a duty we owe to the profession, to notify them without waiting until our next number, that a work so anxiously looked for by many, is already issued from the press. The great reputation of the author throughout the United States, cannot fail to be a sufficient guarantee of the value of the work. We will give a more extended notice in our next. (It will, in a few days, be for sale by Morrison & Talbott, Indianapolis.) E.

ARTICLE II.

MEDICAL ETHICS.

WE give, in this number of the Journal, the Code of Ethics adopted by the National Medical Association, which was recommended by that body for the adoption of subordinate societies, hoping those of our subscribers who may be engaged in organizing these associations, may secure their adoption, and because every physician in the land, whether

connected with a medical society or not, should be governed by the excellent precepts in it laid down.

There is great necessity for a uniformity in the conduct of members of the profession towards each other, which can only be secured by a uniformity in their understanding of what is due from one to another. The origin of many of the unfortunate strifes that arise between physicians, may be traced to a difference of opinion in reference to the proper course of conduct each should pursue, which, by having a uniform standard of ethics, as we trust we will have in the code under consideration, might be avoided, harmony and good fellowship promoted, and the profession advanced in dignity, respectability, and, consequently, in usefulness to society. E.

ARTICLE III.

MEDICAL LEGISLATION.

The Ohio State Medical Convention at its last session, appointed a committee to prepare and present to the legislature of that state, a memorial soliciting the passage of "a law regulating the practice of physic and surgery in the state of Ohio."

It appears that the committee discharged their duty, and petitions, praying for the same thing, were sent up from various parts of the state. These were, with the memorial of the committee of the convention, referred to the standing committee "on medical societies and medical colleges," which made a report, at some length, arguing the importance of the evils of quackery to the community, and the necessity of their suppression; but come to the conclusion that they are beyond the control of legislation, and that the medical profession must look to itself for a cure of these evils.

They say that there are ignorant, misguided, half-read doctors let loose upon community from the offices of respectable physicians, and, therefore, all laws suppressing quackery would be of no avail.

Now, it would be a nice question to make a law that would prevent unqualified practitioners from exercising the functions of the physician, without including such as these, and it would be strange indeed if our friends of the profession in Ohio would ask a law that would not be operative on such as above referred to.

The proposition that the medical profession must look to itself for a cure of the evils of quackery, is absurd, let it come from never so respectable a source. That it may do much is true, but to ask it, with the means of control it has at command, to suppress the thousand gross impositions continually practiced on community by the nostrum venders, and the host of ignorant pretenders who boast loud because regardless of truth, and who cannot be at once detected by non-professional men, because they have not the knowledge necessary to enable them to judge, is certainly another requirement to "make brick without straw."

The true policy of the physician, certainly is, to explain to his patients, as far as possible, the nature and seat of disease, and the mode of cure he proposes to adopt. This will secure the confidence of patients generally, and will, at the same time, diffuse intelligence amongst them. And it is his duty, when he sees them exposing themselves to danger by employing quacks or quack remedies, to admonish them. But that this shall do away with the necessity for a law suppressing quackery, is just as reasonable as that, because we have a clergy amongst us, whose doctrines and teachings are against all sin and iniquity, we have no necessity for a criminal code. As well might legislators say to the clergy, because your body is not clear of members who commit sin, you must look to yourselves and not to the legislature for the means of suppressing crime. Certainly, the influence of the clergy, in suppressing vice and immorality is great, but not so great as to do way with the necessity of criminal legislation. And if, in a matter that all profess to understand, there is a

universally ackowledged necessity for protecting community from being imposed upon, how much plainer the necessity, where the mass of the people cannot be expected to be sufficently informed to judge for themselves.

The question of medical laws is too often regarded in the light of protection to the profession, instead of to the community at large. Physicians have little, if any, personal interest in the passage of laws regulating practice; but, certainly, the whole community is interested in being protected against the depredations of the hoard of ignorant pretenders, by whom lives and limbs are so continually being sacrificed.

We see by an article from the pen of the able Dr. Dawson, of Ohio, in the Western Lancet, that the profession is encouraged to rally for another effort. In this matter duty calls and we hope our friends will respond.

We observe by the newspapers that a physician must, according to a recent decision in one of the New York courts, continue to attend his patient, when once employed, unless the patient refuses to take his presriptions, or the physician gives due notice of his intention to abandon the case. What would be due notice, is, in this case, an important question.

We find, by the journal of the last legislature of Indiana, that a member in the House of Representatives, from one of the interior counties, offered the following resolution :

"*Resolved*, That the committee on benevolent and scientific institutions be instructed to inquire into the expediency of requiring the physicians of this State to attend, without charge, on all persons of their vicinity who are, or may be, sick, and who are not worth more than twenty dollars, exclusive of the necessary wearing apparel of such person and his or her family, and making it an indictable offence for any physician to refuse without a good and sufficient reason therefor."

Which was at once laid on the table.

The same member, not satisfied with this failure to have his proposition simply for instruction entertained, immediately offered the following:

"*Resolved*, That the judiciary committee be instructed to report a bill to this House as soon as may be practicable, reducing the usual charges of physicians as such at least thirty-three per cent."

These efforts of the Honorable Gentleman excited some sport, we understand, but, to the credit of the House, received no further consideration.

Absurd as the propositions in these resolutions are, there are those in the State, as may be inferred by the efforts of this kind made each winter, who seriously think something ought to be done to make the *Doctors* work for nothing in a considerable part of their practice, and for thirty-three per centum less than their services are worth in the remainder. That this should be the case with ignorant and penurious men—those (samples of whom are to be found in almost every community) who are too stingy not only to provide for themselves the ordinary comforts and necessaries of life when in health, but to employ a physician when sick—is not strange; but that a man who can attain to a sufficient standing in society to be elected to the legislature, should publicly propose such a thing, is remarkable indeed.

Let medical men unite against every infringement upon the rights and privileges of the profession, and their duties and obligations to community, whether by quacks or demagogues, and with their intelligence, standing, and extensive acquaintance, they may make their influence felt in such way as to be appreciated. E.

ARTICLE IV.

OUR JOURNAL.

This number is the first of the fifth volume since the work commenced, and begins a new series under a new title. In looking back over the labors of the past, it is highly gratifying to see with what liberality the work has been sustained by the patronage and contributions of the profession of the North-West. And in this last respect particularly have we reason to be thankful, for it has enabled us to furnish to our readers a larger amount of original matter than is given in most of our cotemporaries, of the same size. These favors, we have assurances, will be continued, and, we hope, still more abundantly.

The numerous Medical Societies of the North-West ought to furnish from their archives many highly valuable and interesting papers and reports for publication. This would add interest to the exercises of the associations, by being an incentive to greater research and closer observation in the production of articles, when understood that, if deemed worthy by the society, they are to go before the public, and be permanently placed upon record.

Those of our subscribers who are members of medical societies, will please, for us, tender such associations the use of our Journal for the publication of any articles read before them that may be deemed of interest to the profession.

As there has been, of late, some just ground of complaint against us for a want of punctuality in the time of our issues, which has arisen from our not having a publisher who was interrested in the work, it affords us great pleasure to be able to assure our patrons that they may expect greater regularity hereafter—Mr. John W. Duzan, a practical printer, who has few superiors as a workman in the west, having become interested in the Journal as publisher. E.

ARTICLE V.

WESTERN MEDICAL CONVENTION.

The Western Lancet for January last, contains an article suggesting the propriety of a convention of delegates from Western Medical Colleges, to consult upon certain points of interest particularly to them, and to consider the propriety of adopting and carrying out the suggestions of the National medical convention.

The proposition, so far as we could learn, met with favor generally, and would likely have been carried into effect, but for the shortness of time between the notice and the time proposed for meeting. We, however, are not informed how far the call was responded to by the selection of delegates, except that the faculty of Rush Medical College made such appointment; but we see many reasons why such a convention should be held, and no good reason against it.

West of New York, and North of Tennessee, there are ten medical schools, viz.: one at Lexington, and one at Louisville, Kentucky; one at Cincinnati, one at Columbus, and one at Cleveland, Ohio; one at Laporte, Indiana; one at Chicago, and one at Jacksonville, Illinois; and two at St. Louis, Missouri; amongst which there is great want of uniformity in organization, requirements, and policy.

There may be points of difference which the customs of the schools, and the expectations of the profession in the different latitudes of this district of country, may require to be retained. But if by meeting in convention these matters could be so harmonized as to bring about uniformity in other respects, it would be a most desirable end attained. E.

ARTICLE VI.

MEDICAL INTELLIGENCE.

At the recent commencement of the Rush Medical College, the degree of Doctor of Medicine was conferred on thirty young gentlemen who had complied with the requirements of the institution, and satisfactorily passed the ordeal of examination.

We observe by our excellent exchange, the Southern Medical and Surgical Journal, that the States of South Carolina and Alabama have recently organized State Medical Associations. The physicians of Pennsylvania were to have held a meeting at Lancaster, on the 11th of April, for the same purpose.

We learn by a letter from Dr. A. B. Price, of Boone Grove, Indiana, that he recently attended a patient only two years old, that passed from the bowels six hundred worms, (ascaris lumbricoides) in the course of six weeks. The child was convalescent.

The measles are prevalent in Georgia. Scarletina prevails in different parts of Indiana. There have been quite a number of cases, mostly of a mild form, at Indianapolis, during March and April, but it has nearly, if not entirely, disappeared. No case of the small-pox has occurred here for nearly three months.

A lady in Georgia, while under the influence of ether, suddenly and permanently recovered her hearing.

The medical class of the University of Pennsylvania, to evince their respect for Prof. Chapman, last winter, procured his portrait to be taken in the best style, and presented it to the Wistar Museum.

From accounts received, we have no doubt but the National Medical Association, which convenes in Baltimore tomorrow, will be the largest meeting of physicians ever held in the United States. Dr. Herrick, one of the editors of the Journal, has gone as a delegate from Rush Medical College.

We shall expect, in our next number, to be able to furnish an interesting account of its proceedings.

A case of congenital absence of both eyes in a negro child is reported by Dr. Williman, in the Charleston Medical Journal and Review. The deficiency is simply of the globes.

Prof. Syme, of Edinburgh, succeeds Liston in the chair of surgery, in the London University College Hospital.

The Willoughby Medical College, which was, about a year ago, removed to Columbus, Ohio, has been dispensed with, and its faculty transferred to the Starling Medical College, which Lyne Starling, Esq., of that place, recently endowed by a donation of thirty thousand dollars.

A portion of the Indiana Hospital for the Insane, sufficient for the accommodation of fifty patients, will be ready for their reception by the latter part of July next. The medical Superintendent to be appointed as successor to Dr. Evans, who resigns the place, has not yet been selected by the board of Commissioners.

Dr. Post, of New York, recently relieved a case of violent paroxysmal cough, that came on at night, in which no disease was detected, except redness of the fauces, and slight enlargement of the uvula, by the application of a strong solution of nit. argent. to these parts.

Dr. Thomas T. Hewson, of Philadelphia, for many years one of the surgeons of the Pennsylvania Hospital, and the Philadelphia Alms-House, died on the 19th of February last, aged 75 years. He was, at the time of his death, President of the Philadelphia College of Physicians.

Dr. Jacob Randolph, son-in-law of the late Dr. Physick, of Philadelphia, one of the surgeons of the Pennsylvania Hospital, &c., died recently. E.

NOTICE TO READERS, CORRESPONDENTS, AND OTHERS.

We have received from Dr. Gregg an original article which will appear in our next number.

We have several other original communications promised.

We have received from S. S. & W. Wood, too late for notice in this number, the following books, which are for sale by Joseph Keene, Chicago, Ill.:

The Young Stethoscopist, or the Student's aid to Auscultation. By Henry J. Bowditch, M.D., one of the Physicians of Mass. Gen. Hospital.

Materia Medica and Therapeutics. By Martyn Paine, A.M., M.D., Professor of the Institutes of Med. and Mat. Med. in the University of New York, &c., &c.

The Obstetrical Remembrancer, or Denman's Aphorisms on Natural and Difficult Parturition, application and use of Instruments, &c. By Michael Ryan, M.D. First American from 9th London edition, with additions by Thomas F. Cock, M.D., visiting physician of New York Lying-in Asylum.

Memoranda on Anatomy, Surgery, and Physiology, forming a Pocket Companion for the Young Surgeon, or for Students preparing for examination. By Mark Noble Bower, Surgeon. Corrected and enlarged by an American Physician.

Opthalmic Memoranda, respecting those diseases of the Eye which are more frequently met with in practice. By John Foote, F. R. C. S. L., &c., &c.

From Lea & Blanchard, a copy of the new edition of Churchill's Midwifery.

Also, 25th Annual Report of the New York Asylum for Lying-in Women.

The Report of the Physicians of the Lunatic Asylum to the Medical Board of Blackwell's Island. Document No. 48, Board of Aldermen, N. Y.

And we have also received our usual exchanges.

We invite the attention of those interested in Medical Colleges, of medical book publishers, surgical instrument makers, &c., to our advertising sheet, which will be extended according to patronage. The terms are, for each page, per annum, $10; one insertion, $5. Half page per annum, $6; one insertion, $3. All advertisements of patent or secret remedies, &c., excluded.